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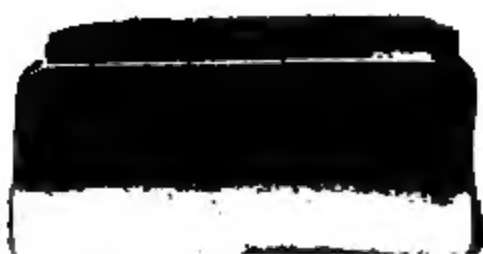
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# Public Documents of Massachusetts:

BEING THE

## ANNUAL REPORTS

OF VARIOUS

## PUBLIC OFFICERS AND INSTITUTIONS

FOR THE YEAR

1893.

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PUBLISHED BY THE SECRETARY OF THE COMMONWEALTH.

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Vol. XI.

BOSTON:  
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,  
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**FIFTY-SECOND REPORT**

**OF**

**BIRTHS, MARRIAGES, AND DEATHS**

**IN THE**

**COMMONWEALTH ;**

**RETURNS OF LIBELS FOR DIVORCE,**

**AND RETURNS OF DEATHS INVESTIGATED BY THE**

**MEDICAL EXAMINERS,**

**FOR THE YEAR 1893.**

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**PREPARED BY THE**

**SECRETARY OF THE COMMONWEALTH.**

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**EDITED BY**

**FRANCIS A. HARRIS, M.D.**

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**BOSTON :**

**WRIGHT & POTTER PRINTING CO., STATE PRINTERS,**

**18 POST OFFICE SQUARE.**

**1894.**



## Commonwealth of Massachusetts.

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OFFICE OF THE SECRETARY, BOSTON, Oct. 27, 1894.

*To the Honorable Senate*

*and the House of Representatives :*

I have the honor to submit herewith, as required by law, the Fifty-second Annual Registration Report, relating to the births, marriages and deaths occurring in Massachusetts and registered in the several cities and towns during the year ending Dec. 31, 1893 ; and containing, also, the reports relating to libels for divorce in the several counties, and the returns of deaths, the causes and manner of which have been investigated by the medical examiners during the year 1893.

The rule adopted two years ago of restricting the exhibition of tabular results to such as are plainly of practical utility within the meaning of the statute by authority of which the tables are prepared, is continued, and the report is again edited by FRANCIS A. HARRIS, M.D.

Very respectfully,

Your obedient servant,

WM. M. OLIN,

*Secretary of the Commonwealth.*

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(TABLES)

Fifty-second

ANNUAL REPORT

OF

BIRTHS, MARRIAGES, AND DEATHS,

REGISTERED IN

MASSACHUSETTS,

FOR THE YEAR ENDING DECEMBER 31, 1893.

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TABLE I. — POPULATION, [1890] — BIRTHS,

*General Abstract, exhibiting, in Connection with the Population Deaths registered in Each County and Town in Massachusetts Children Born, the Nativity of Persons Married, and the Sex, ber who Died.*

THE STATE AND COUNTIES.	Population, U. S. Census, 1890.	BIRTHS.								
		Whole No.	SEX.			PARENTAGE.				
			M.	F.	Unk.	Am.	For.	Am. Pa. and For. Mo.	For. Pa. and Am. Mo.	Unk.
MASSACHUSETTS, .	2,238,943	67,192	34,328	32,829	35	21,788	31,448	7,003	6,666	287
BARNSTABLE, .	29,172	516	269	247	-	344	105	25	40	2
BERKSHIRE, .	81,108	2,288	1,130	1,158	-	1,109	640	234	288	12
BRISTOL, . .	186,465	6,200	3,222	2,970	8	1,485	3,503	621	558	33
DUKES, . .	4,369	73	34	38	1	49	18	3	8	-
ESSEX, . .	299,995	8,392	4,300	4,091	1	3,019	3,622	926	780	45
FRANKLIN, . .	38,610	908	508	400	-	430	346	67	60	5
HAMPDEN, . .	135,713	4,864	2,486	2,376	2	1,450	2,447	464	490	13
HAMPSHIRE, .	51,859	1,194	580	618	1	533	440	111	106	4
MIDDLESEX, .	431,167	13,197	6,775	6,416	6	4,081	6,317	1,481	1,277	41
NANTUCKET, .	3,268	55	27	28	-	35	4	10	6	-
NORFOLK, . .	118,950	3,132	1,604	1,528	-	1,229	1,272	298	318	15
PLYMOUTH, . .	92,700	2,144	1,069	1,074	1	1,166	573	196	193	16
SUFFOLK, . .	484,780	15,538	7,912	7,619	7	4,006	8,148	1,711	1,622	51
WORCESTER, .	280,787	8,696	4,412	4,276	8	2,852	4,013	856	925	50



## MARRIAGES, AND DEATHS, 1893.

according to the U. S. Census of 1890, — the Births, Marriages, and during the Year 1893, — distinguishing the Sex and the Parentage of Nativity, and Aggregate and Average Ages by Counties of the Num-

MARRIAGES.						DEATHS.								
Couples.	NATIVITY.					Persons.	SEX.		NATIVITY.			No. whose Ages are registered.	AGE.	
	Am.	For.	Am. Grooms.	For. Grooms.	Unk.		M.	F.	Am.	For.	Unk.		Agg'ts.	Av'ge.
22,314	10,029	7,800	2,635	2,274	7	42,034	24,899	24,185	35,235	12,136	663	42,923	1,665,794	34-04
200	148	20	17	18	-	592	308	284	505	76	11	591	29,551	50-00
613	334	120	52	56	1	1,505	757	748	1,120	331	54	1,500	56,244	37-49
2,089	763	887	240	199	-	4,608	2,410	2,198	3,306	1,254	48	4,592	136,208	29-66
39	27	9	2	1	-	115	68	47	98	11	6	114	6,021	52-81
3,108	1,470	992	412	332	1	6,064	3,026	3,038	4,429	1,557	78	6,011	209,699	34-88
335	236	61	30	18	-	654	333	321	551	74	29	650	29,857	45-93
1,401	603	635	127	136	-	2,999	1,480	1,519	2,190	759	50	2,991	92,542	30-94
419	234	195	35	35	1	1,037	518	519	811	212	14	1,035	41,912	40-49
4,373	1,798	1,572	543	400	-	9,420	4,722	4,698	6,637	2,656	127	9,394	313,404	33-37
21	18	-	1	2	-	68	47	41	81	5	2	88	4,990	56-70
976	485	288	111	91	1	2,294	1,142	1,152	1,746	529	28	2,283	89,995	39-42
849	529	149	91	71	-	1,751	952	799	1,445	289	17	1,744	77,174	44-25
5,745	2,000	2,399	707	588	-	12,280	6,334	5,946	8,178	3,980	122	12,274	377,178	30-73
2,655	1,274	845	266	287	3	5,677	2,892	2,875	4,188	1,412	77	5,656	200,929	35-52

TABLE I. — *Births, Marriages, and Deaths,*

COUNTIES AND TOWNS.	Population, U. S. Census, 1890.	BIRTHS.								
		Whole No.	SEX.			PARENTAGE.				
			M.	F.	Unk.	Am.	For.	Am. Fa. and For. Mo.	For. Fa. and Am. Mo.	Unk.
<b>BARNSTABLE, .</b>	<b>29,172</b>	<b>516</b>	<b>269</b>	<b>247</b>	<b>-</b>	<b>344</b>	<b>105</b>	<b>25</b>	<b>40</b>	<b>2</b>
Barnstable, . . .	4,023	75	39	36	-	62	2	5	5	1
Bourne, . . .	1,442	81	21	10	-	26	2	2	1	-
Brewster, . . .	1,003	11	7	4	-	10	-	-	-	1
Chatham, . . .	1,954	20	9	11	-	19	-	1	-	-
Dennis, . . .	2,899	49	20	29	-	40	2	4	3	-
Eastham, . . .	602	6	2	4	-	6	-	-	-	-
Falmouth, . . .	2,567	43	27	16	-	31	7	3	3	-
Harwich, . . .	2,784	46	28	18	-	37	7	-	2	-
Mashpee, . . .	298	14	9	5	-	14	-	-	-	-
Orleans, . . .	1,219	22	7	15	-	21	-	-	1	-
Provincetown, . . .	4,642	123	70	53	-	25	74	7	22	-
Sandwich, . . .	1,819	18	7	11	-	12	4	2	-	-
Truro, . . .	919	14	8	6	-	9	4	-	1	-
Wellfleet, . . .	1,291	16	4	12	-	11	2	2	1	-
Yarmouth, . . .	1,760	23	11	12	-	21	1	-	1	-
<b>BERKSHIRE, .</b>	<b>81,108</b>	<b>2,283</b>	<b>1,130</b>	<b>1,153</b>	<b>-</b>	<b>1,199</b>	<b>640</b>	<b>234</b>	<b>238</b>	<b>12</b>
Adams, . . .	9,213	282	142	140	-	76	119	36	50	1
Alford, . . .	297	5	3	2	-	4	-	-	-	1
Becket, . . .	946	11	7	4	-	10	1	-	-	-
Cheshire, . . .	1,308	20	11	9	-	8	4	4	4	-
Clarksburg, . . .	884	25	11	14	-	11	10	3	1	-
Dalton, . . .	2,885	85	49	36	-	52	14	10	9	-
Egremont, . . .	845	4	1	3	-	3	-	-	1	-
Florida, . . .	486	9	6	3	-	2	4	-	3	-
Gt. Barrington, . . .	4,612	78	40	38	-	44	17	8	8	1
Hancock, . . .	506	10	9	1	-	10	-	-	-	-
Hinsdale, . . .	1,739	39	22	17	-	26	3	4	6	-
Lanesborough, . . .	1,018	21	9	12	-	16	3	1	-	1
Lee, . . .	3,785	72	33	39	-	40	18	5	9	-
Lenox, . . .	2,889	71	35	36	-	26	24	7	14	-
Monterey, . . .	495	6	5	1	-	5	-	1	-	-
Mt. Washington, . . .	148	4	4	-	-	3	-	-	1	-
New Ashford, . . .	125	4	2	2	-	4	-	-	-	-
New Marlborough	1,305	10	2	8	-	3	1	-	-	1
North Adams, . . .	16,074	617	308	309	-	266	221	57	70	3
Otis, . . .	583	16	11	5	-	16	-	-	-	-
Peru, . . .	305	7	3	4	-	6	-	-	1	-
Pittsfield, . . .	17,281	617	293	324	-	303	159	62	91	2
Richmond, . . .	796	14	9	5	-	6	1	3	4	-
Sandisfield, . . .	807	9	4	5	-	7	-	1	-	1
Savoy, . . .	569	10	2	8	-	10	-	-	-	-
Sheffield, . . .	1,954	31	14	17	-	25	1	3	2	-
Stockbridge, . . .	2,132	34	16	18	-	26	3	3	2	-
Tyringham, . . .	412	1	1	-	-	1	-	-	-	-
Washington, . . .	434	13	4	9	-	8	2	2	1	-
W. Stockbridge, . . .	1,492	23	13	15	-	20	1	4	3	-
Williamstown, . . .	4,221	119	53	61	-	57	34	19	8	1
Windsor, . . .	612	11	3	8	-	19	-	1	-	-
<b>BRISTOL, . .</b>	<b>186,465</b>	<b>6,200</b>	<b>3,222</b>	<b>2,970</b>	<b>8</b>	<b>1,485</b>	<b>3,503</b>	<b>621</b>	<b>558</b>	<b>33</b>
Acushnet, . . .	1,027	18	11	7	-	17	1	-	-	-
Attleborough, . . .	7,577	224	116	108	-	87	80	31	26	-
Berkley, . . .	894	18	7	11	-	11	3	1	3	-
Dartmouth, . . .	3,122	42	21	20	1	27	10	2	3	-
Dighton, . . .	1,889	36	21	15	-	20	10	4	2	-
Easton, . . .	4,493	132	62	70	-	37	69	13	13	-
Fairhaven, . . .	2,919	48	22	26	-	31	13	2	2	-
Fall River, . . .	74,398	2,794	1,445	1,349	-	407	1,870	279	230	8
Freetown, . . .	1,417	36	18	18	-	25	6	2	2	1
Mansfield, . . .	3,432	62	33	29	-	39	9	7	7	-
New Bedford, . . .	40,733	1,617	872	740	5	296	978	158	166	19
North Attleboro',*	6,727	131	70	59	2	56	44	16	15	-

\* Incorporated 1887.

Registered during the Year 1893 — Continued.

MARRIAGES.						DEATHS.									
Couples.	NATIVITY.					Persons.	SEX.		NATIVITY.			No. whose Ages are registered.	AGE.		
	Am.	For.	Am. Groom.	For. Groom.	Unk.		M.	F.	Am.	For.	Unk.		Agg'te.	Av'ge.	
209	143	20	17	18	-	592	308	284	505	76	11	591	29,551	50.00	
23	20	2	4	2	-	80	38	42	76	4	-	-	-	-	
14	11	-	1	2	-	15	8	7	10	2	3	-	-	-	
4	3	1	-	-	-	13	6	7	11	2	-	-	-	-	
15	14	-	1	-	-	23	14	14	28	-	-	-	-	-	
18	16	-	2	-	-	50	29	30	56	2	1	-	-	-	
3	2	-	-	1	-	11	5	6	9	-	2	-	-	-	
18	10	5	1	2	-	53	23	30	48	4	1	-	-	-	
29	23	3	2	1	-	61	29	32	59	2	-	-	-	-	
3	8	-	-	-	-	8	7	1	8	-	-	-	-	-	
9	8	-	-	1	-	22	10	12	21	-	1	-	-	-	
36	12	12	4	8	-	121	63	58	92	23	1	-	-	-	
12	9	2	-	1	-	30	15	15	24	6	-	-	-	-	
3	2	-	1	-	-	43	34	8	16	25	2	-	-	-	
7	6	-	1	-	-	15	7	8	14	1	-	-	-	-	
10	9	1	-	-	-	33	19	14	33	-	-	-	-	-	
613	334	120	52	56	1	1,506	757	748	1,120	331	54	1,500	56,244	37.49	
65	24	27	7	7	-	144	65	79	97	45	2	-	-	-	
2	2	-	-	-	-	6	2	4	6	-	-	-	-	-	
5	1	2	-	2	-	23	13	10	21	2	-	-	-	-	
5	8	2	-	-	-	20	11	9	14	6	-	-	-	-	
3	2	1	-	-	-	14	8	6	9	4	1	-	-	-	
29	21	3	1	4	-	53	22	31	44	9	-	-	-	-	
4	4	-	-	-	-	14	11	3	12	1	1	-	-	-	
2	1	1	-	-	-	8	5	3	7	1	-	-	-	-	
45	31	6	3	4	1	92	48	44	73	19	-	-	-	-	
3	3	-	-	-	-	6	5	1	6	-	-	-	-	-	
16	13	-	-	3	-	34	22	12	23	9	2	-	-	-	
9	6	-	2	1	-	20	8	12	19	1	-	-	-	-	
23	18	2	-	3	-	49	19	30	33	9	2	-	-	-	
13	6	4	2	1	-	33	15	18	22	11	-	-	-	-	
4	3	-	1	-	-	6	1	5	6	-	-	-	-	-	
1	1	-	-	-	-	4	1	3	4	-	-	-	-	-	
-	-	-	-	-	-	2	1	1	2	-	-	-	-	-	
11	8	-	2	1	-	25	12	13	14	3	6	-	-	-	
144	79	34	15	16	-	370	194	176	269	84	17	-	-	-	
4	4	-	-	-	-	8	4	4	8	-	-	-	-	-	
4	4	-	-	-	-	4	1	3	2	1	1	-	-	-	
137	67	23	15	7	-	293	147	146	213	74	6	-	-	-	
1	1	-	-	-	-	14	7	7	8	6	-	-	-	-	
5	4	-	-	1	-	18	10	3	10	-	3	-	-	-	
1	1	-	-	-	-	12	6	6	11	1	-	-	-	-	
8	8	-	-	-	-	51	25	26	39	9	3	-	-	-	
5	5	-	-	-	-	39	19	20	29	10	-	-	-	-	
6	6	-	-	-	-	6	2	3	5	-	-	-	-	-	
1	-	-	1	-	-	7	6	1	6	-	1	-	-	-	
7	4	2	-	1	-	35	19	16	23	12	1	-	-	-	
42	26	8	3	5	-	95	46	49	76	14	5	-	-	-	
8	8	-	-	-	-	6	2	4	5	-	1	-	-	-	
2,039	763	337	240	199	-	4,008	2,410	2,198	3,306	1,254	48	4,592	136,208	29.66	
7	7	-	-	-	-	23	14	14	20	2	6	-	-	-	
84	50	13	12	9	-	149	77	72	121	23	5	-	-	-	
8	-	-	-	1	-	20	12	8	19	-	1	-	-	-	
18	14	2	2	-	-	63	34	29	51	6	6	-	-	-	
13	11	-	1	1	-	38	21	17	35	2	1	-	-	-	
34	12	16	1	5	-	74	45	29	53	17	4	-	-	-	
22	17	4	-	1	-	65	33	32	58	6	1	-	-	-	
332	229	483	127	93	-	2,048	1,065	983	1,337	708	3	-	-	-	
3	6	-	-	2	-	20	11	9	17	3	-	-	-	-	
23	21	3	3	1	-	50	30	20	46	4	-	-	-	-	
569	170	274	56	59	-	1,115	566	549	839	269	7	-	-	-	
54	33	12	6	3	-	117	64	53	79	37	1	-	-	-	

TABLE I. — *Births, Marriages, and Deaths,*

COUNTIES AND TOWNS.	Population, U. S. Census, 1890.	BIRTHS.								
		Whole No.	SEX.			PARENTAGE.				
			M.	F.	Unk.	Am.	For.	Am. Fa. and For. Mo.	For. Fa. and Am. Mo.	Unk.
<i>Bristol — Con.</i>										
Norton, . . .	1,785	27	14	13	-	15	4	2	6	-
Raynham, . . .	1,340	31	16	15	-	24	5	-	2	-
Rehoboth, . . .	1,786	38	15	23	-	25	4	2	7	-
Seekonk, . . .	1,317	21	13	8	-	13	4	3	1	-
Somerset, . . .	2,106	51	24	27	-	25	17	6	3	-
Swansey, . . .	1,456	32	15	17	-	19	8	4	1	-
Taunton, . . .	25,448	776	390	386	-	273	347	85	66	5
Westport, . . .	2,599	66	37	29	-	38	21	4	3	-
<i>DUKES, . . .</i>										
Dukes, . . .	4,369	73	34	38	1	49	18	3	3	-
Ohlmark, . . .	853	8	3	5	-	7	1	-	-	-
Cottage City, . . .	1,080	19	10	9	-	6	11	1	1	-
Edgartown, . . .	1,156	21	6	15	-	15	5	-	1	-
Gay Head, . . .	139	2	1	1	-	1	-	1	-	-
Gosnold, . . .	135	-	-	-	-	-	-	-	-	-
Tisbury, . . .	1,506	20	13	6	1	17	1	1	1	-
West Tisbury,* . . .	-	3	1	2	-	3	-	-	-	-
<i>ESSEX, . . .</i>										
Essex, . . .	299,995	8,392	4,300	4,091	1	3,019	3,022	926	780	45
Amesbury, . . .	9,798	307	153	154	-	92	130	38	47	-
Andover, . . .	6,142	118	60	58	-	41	45	19	13	-
Beverly, . . .	10,821	246	120	126	-	150	36	38	22	-
Boxford, . . .	866	12	6	6	-	9	2	1	-	-
Bradford, . . .	3,720	94	49	45	-	59	19	7	9	-
Danvers, . . .	7,454	149	84	65	-	76	32	22	19	-
Essex, . . .	1,713	38	14	24	-	22	6	5	5	-
Georgetown, . . .	2,117	35	18	17	-	25	4	1	5	-
Gloucester, . . .	24,651	661	340	321	-	200	302	74	34	1
Groveland, . . .	2,191	35	19	16	-	26	6	2	1	-
Hamilton, . . .	961	17	10	7	-	10	2	3	2	-
Haverhill, . . .	27,412	872	446	426	-	347	348	90	82	5
Ipswich, . . .	4,439	89	46	43	-	44	23	12	10	-
Lawrence, . . .	44,654	1,537	758	779	-	252	1,028	133	124	-
Lynn, . . .	55,727	1,701	868	832	1	607	716	188	156	34
Lynnfield, . . .	787	12	9	3	-	12	-	-	-	-
Manchester, . . .	1,789	28	15	13	-	11	10	4	3	-
Marblehead, . . .	8,202	175	90	85	-	129	10	26	7	3
Merrimac, . . .	2,633	47	31	16	-	29	8	6	4	-
Methuen, . . .	4,814	129	72	57	-	35	61	19	14	-
Middleton, . . .	924	17	10	7	-	14	1	1	1	-
Nahant, . . .	880	17	9	8	-	7	2	5	3	-
Newbury, . . .	1,427	21	12	9	-	16	2	1	2	-
Newburyport, . . .	13,947	323	153	170	-	164	88	46	25	-
North Andover, . . .	3,742	79	45	34	-	30	33	11	5	-
Peabody, . . .	10,158	233	158	125	-	110	116	28	29	-
Rockport, . . .	4,087	100	51	49	-	38	54	6	2	-
Rowley, . . .	1,248	30	16	14	-	21	2	4	3	-
Salem, . . .	30,801	934	500	434	-	238	481	88	77	-
Salisbury, . . .	1,316	15	6	9	-	10	-	5	-	-
Saugus, . . .	3,673	124	68	66	-	67	32	21	14	-
Swampscott, . . .	3,198	80	37	43	-	38	18	15	7	2
Topsfield, . . .	1,022	11	3	8	-	7	-	2	2	-
Wenham, . . .	886	15	8	7	-	13	-	2	-	-
West Newbury, . . .	1,796	31	16	15	-	20	5	3	3	-
<i>FRANKLIN, . . .</i>										
Franklin, . . .	38,610	908	508	400	-	430	346	67	60	5
Ashfield, . . .	1,025	11	4	7	-	9	1	-	1	-
Bernardston, . . .	770	16	8	8	-	9	4	-	3	-
Buckland, . . .	1,570	29	14	15	-	9	8	8	4	-
Charlemont, . . .	972	32	19	13	-	26	3	2	1	-
Colrain, . . .	1,671	32	12	20	-	15	7	4	6	-

\* Incorporated 1892.

*Registered during the Year 1893 — Continued.*

TABLE I. — *Births, Marriages, and Deaths,*

COUNTIES AND TOWNS.	Population, U. S. Census, 1890.	BIRTHS.								
		Whole No.	SEX.			PARENTAGE.				
			M.	F.	Unk.	Am.	For.	Am. Fa. and For. Mo.	For. Fa. and Am. Mo.	Unk.
<i>Franklin — Con.</i>										
Conway, . . .	1,451	23	15	8	-	13	3	5	2	-
Deerfield, . . .	2,910	58	35	23	-	30	7	9	12	-
Erving, . . .	972	28	17	11	-	16	9	3	-	-
Gill, . . .	960	22	14	8	-	16	5	1	-	-
Greenfield, . . .	5,252	99	63	36	-	57	29	7	5	1
Hawley, . . .	515	7	3	4	-	7	-	-	-	-
Heath, . . .	503	9	8	1	-	9	-	-	-	-
Leverett, . . .	702	10	4	6	-	9	1	-	-	-
Leyden, . . .	407	6	2	4	-	5	-	-	1	-
Monroe, . . .	282	9	2	7	-	7	2	-	-	-
Montague, . . .	6,206	268	155	113	-	86	210	10	10	2
New Salem, . . .	856	13	6	7	-	9	1	2	1	-
Northfield, . . .	1,869	21	11	10	-	16	1	2	1	1
Orange, . . .	4,568	136	75	61	-	82	41	7	6	-
Rowe, . . .	541	8	4	4	-	-	6	1	1	-
Shelburne, . . .	1,553	13	11	2	-	10	1	-	2	-
Shutesbury, . . .	453	12	4	8	-	10	-	2	-	-
Sunderland, . . .	663	16	10	6	-	10	3	2	1	-
Warwick, . . .	565	18	8	10	-	11	4	1	2	-
Wendell, . . .	505	3	1	2	-	3	-	-	-	-
Whately, . . .	779	9	3	6	-	6	-	1	1	1
<b>HAMPDEN, . . .</b>	<b>135,713</b>	<b>4,864</b>	<b>2,436</b>	<b>2,376</b>	<b>2</b>	<b>1,450</b>	<b>2,447</b>	<b>464</b>	<b>490</b>	<b>13</b>
Agawam, . . .	2,352	48	18	30	-	26	12	1	9	-
Blandford, . . .	871	13	7	6	-	13	-	-	-	-
Brimfield, . . .	1,096	10	8	2	-	9	-	-	1	-
Chester, . . .	1,295	32	12	20	-	18	7	1	6	-
Chicopee, . . .	14,050	611	317	294	-	139	356	58	58	-
Granville, . . .	1,061	22	11	11	-	13	7	-	2	-
Hampden, . . .	831	7	5	2	-	7	-	-	-	-
Holland, . . .	201	4	1	3	-	3	1	-	-	-
Holyoke, . . .	35,637	1,718	894	824	-	290	1,142	137	147	2
Longmeadow, . . .	2,183	74	33	41	-	15	50	3	6	-
Ludlow, . . .	1,939	69	42	27	-	22	27	10	9	1
Monson, . . .	3,650	69	35	34	-	32	17	8	12	-
Montgomery, . . .	266	2	1	1	-	-	1	-	-	1
Palmer, . . .	6,520	183	92	91	-	59	86	18	18	2
Russell, . . .	879	26	10	16	-	14	2	5	5	-
Southwick, . . .	914	10	7	3	-	8	1	-	-	1
Springfield, . . .	44,179	1,473	731	742	-	548	579	170	170	6
Tolland, . . .	393	-	-	-	-	-	-	-	-	-
Wales, . . .	700	17	9	8	-	10	4	2	1	-
Westfield, . . .	9,805	278	147	131	-	132	96	25	25	-
West Springfield, . . .	5,077	158	81	76	1	75	45	21	17	-
Wilbraham, . . .	1,814	40	25	14	1	17	14	5	4	-
<b>HAMPSHIRE, . . .</b>	<b>51,859</b>	<b>1,194</b>	<b>580</b>	<b>613</b>	<b>1</b>	<b>533</b>	<b>440</b>	<b>111</b>	<b>106</b>	<b>4</b>
Amherst, . . .	4,512	65	26	39	-	46	10	3	4	2
Belchertown, . . .	2,120	42	20	22	-	21	9	7	5	-
Chesterfield, . . .	608	9	3	6	-	8	1	-	-	-
Cummington, . . .	787	8	3	5	-	7	-	-	1	-
Easthampton, . . .	4,395	101	50	51	-	39	39	11	11	1
Enfield, . . .	952	26	12	14	-	14	7	4	1	-
Goshen, . . .	297	8	4	4	-	7	-	1	-	-
Granby, . . .	765	17	7	10	-	11	1	4	1	-
Greenwich, . . .	526	7	5	2	-	7	-	-	-	-
Hadley, . . .	1,069	27	14	13	-	18	7	-	2	-
Hatfield, . . .	1,246	23	14	9	-	11	6	2	4	-
Huntington, . . .	1,385	47	21	26	-	23	16	3	5	-
Middlefield, . . .	455	7	3	4	-	5	1	-	1	-
Northampton, . . .	14,990	376	176	200	-	149	147	40	40	-
Pelham, . . .	486	8	3	5	-	8	-	-	-	-
Plainfield, . . .	435	6	3	3	-	5	1	-	-	-
Prescott, . . .	376	6	5	1	-	4	1	1	-	-

Registered during the Year 1893 — Continued.

MARRIAGES.						DEATHS.									
Couples.	NATIVITY.					Persons.	SEX.		NATIVITY.			No. whose Ages are registered.	AGE.		
	Am.	For.	Am. Groom.	For. Groom.	Unk.		M.	F.	Am.	For.	Unk.		Agg'te.	Av'ge.	
15	14	-	1	-	-	21	10	11	21	-	-	-	-	-	
20	17	1	1	1	-	40	23	17	31	5	4	-	-	-	
10	6	2	1	1	-	22	12	10	20	1	1	-	-	-	
4	3	1	-	-	-	12	6	6	9	2	1	-	-	-	
60	37	10	8	5	-	103	49	54	80	18	5	-	-	-	
1	1	-	-	-	-	5	2	3	5	-	-	-	-	-	
3	3	-	-	-	-	8	6	2	7	1	-	-	-	-	
5	5	-	-	-	-	16	4	12	14	-	2	-	-	-	
4	4	-	-	-	-	6	3	3	5	1	-	-	-	-	
-	-	-	-	-	-	4	2	2	4	-	-	-	-	-	
54	24	21	5	4	-	97	53	44	67	27	3	-	-	-	
5	4	-	1	-	-	16	7	9	12	1	3	-	-	-	
11	10	-	1	-	-	20	12	8	19	1	-	-	-	-	
42	30	6	3	3	-	89	41	48	79	7	3	-	-	-	
3	1	-	2	-	-	9	2	7	8	-	1	-	-	-	
12	10	-	2	-	-	31	11	20	30	1	-	-	-	-	
3	3	-	-	-	-	12	8	4	11	-	1	-	-	-	
6	4	1	1	-	-	8	3	5	7	-	1	-	-	-	
4	4	-	-	-	-	10	8	2	10	-	-	-	-	-	
2	1	-	1	-	-	14	7	7	14	-	-	-	-	-	
10	8	1	-	1	-	18	11	7	17	1	-	-	-	-	
1,401	603	535	127	136	-	2,999	1,480	1,519	2,190	759	50	2,991	92,542	30.94	
19	15	2	1	1	-	45	26	19	32	12	1	-	-	-	
2	2	-	-	-	-	17	9	8	17	-	-	-	-	-	
3	2	1	-	-	-	26	13	13	24	2	-	-	-	-	
11	6	1	1	3	-	33	15	18	18	1	14	-	-	-	
219	50	145	12	12	-	383	193	190	270	111	2	-	-	-	
5	4	1	-	-	-	19	12	7	14	5	-	-	-	-	
5	3	1	-	1	-	12	7	5	12	-	-	-	-	-	
1	1	-	-	-	-	5	3	2	4	-	1	-	-	-	
385	111	192	35	47	-	777	372	405	509	262	6	-	-	-	
15	8	6	1	-	-	40	28	12	35	5	-	-	-	-	
24	6	11	4	3	-	51	35	16	31	18	2	-	-	-	
22	18	1	2	1	-	55	30	25	48	6	1	-	-	-	
4	4	-	-	-	-	9	6	3	8	1	-	-	-	-	
63	24	34	3	2	-	154	69	85	112	42	-	-	-	-	
7	2	3	2	-	-	22	10	12	16	5	1	-	-	-	
10	10	-	-	-	-	17	11	6	16	1	-	-	-	-	
456	235	111	54	56	-	960	460	500	732	219	9	-	-	-	
2	2	-	-	-	-	4	1	3	4	-	-	-	-	-	
3	3	-	-	-	-	10	3	7	10	-	-	-	-	-	
90	56	21	8	5	-	202	103	99	160	34	3	-	-	-	
44	33	4	2	5	-	122	53	64	96	24	2	-	-	-	
11	8	1	2	-	-	36	16	20	22	11	3	-	-	-	
410	234	105	35	35	1	1,037	513	519	811	212	14	1,035	41,912	40.49	
44	30	9	2	3	-	59	35	24	54	3	2	-	-	-	
13	13	-	-	-	-	51	29	22	44	5	2	-	-	-	
11	11	-	-	-	-	14	6	8	12	-	2	-	-	-	
3	3	-	-	-	-	9	4	5	9	-	-	-	-	-	
37	13	16	4	4	-	96	39	57	67	28	1	-	-	-	
3	2	1	-	-	-	36	19	17	30	6	-	-	-	-	
1	1	-	-	-	-	12	5	7	11	1	-	-	-	-	
4	3	1	-	-	-	18	7	11	13	4	1	-	-	-	
2	1	-	-	1	-	13	11	7	18	-	-	-	-	-	
16	11	4	-	1	-	34	17	17	27	7	-	-	-	-	
6	3	1	2	-	-	16	9	7	12	4	-	-	-	-	
7	5	1	-	1	-	38	14	24	23	9	1	-	-	-	
3	2	-	-	1	-	6	4	2	6	-	-	-	-	-	
135	76	30	14	15	-	268	132	136	203	64	1	-	-	-	
6	4	-	1	1	-	9	2	7	9	-	-	-	-	-	
2	2	-	-	-	-	15	11	4	15	-	-	-	-	-	
6	6	-	-	-	-	9	7	2	8	1	-	-	-	-	



TABLE I. — *Births, Marriages, and Deaths,*

COUNTIES AND TOWNS.	Population, U. S. Census, 1890.	BIRTHS.								
		Whole No.	SEX.			PARENTAGE.				
			M.	F.	Unk.	Am.	For.	Am. Fa. and For. Mo.	For. Fa. and Am. Mo.	Unk.
<i>Hampshire — Con.</i>										
Southampton, .	1,017	17	5	12	—	13	3	1	—	—
South Hadley, .	4,261	103	53	50	—	37	52	8	6	—
Ware, .	7,329	216	112	104	—	52	126	19	19	—
Westhampton, .	477	15	9	6	—	11	1	2	1	—
Williamsburg, .	2,067	49	25	23	1	26	12	5	5	1
Worthington, .	714	11	7	4	—	11	—	—	—	—
<b>MIDDLESEX, .</b>	<b>431,167</b>	<b>13,197</b>	<b>6,775</b>	<b>6,416</b>	<b>6</b>	<b>4,081</b>	<b>6,317</b>	<b>1,481</b>	<b>1,277</b>	<b>41</b>
Acton, .	1,897	42	23	19	—	27	8	2	5	—
Arlington, .	5,629	169	81	88	—	48	76	15	30	—
Ashby, .	825	8	4	4	—	7	—	—	1	—
Ashland, .	2,532	41	20	21	—	21	10	6	4	—
Ayer, .	2,148	61	30	31	—	32	15	9	5	—
Bedford, .	1,092	22	14	8	—	11	8	3	—	—
Belmont, .	2,098	61	32	29	—	23	22	10	6	—
Billerica, .	2,380	38	15	23	—	12	17	7	2	—
Boxborough, .	325	5	—	5	—	4	1	—	—	—
Burlington, .	617	8	1	7	—	5	2	—	1	—
Cambridge, .	70,028	2,416	1,227	1,189	—	668	1,253	264	226	10
Carlisle, .	481	3	1	2	—	2	1	—	—	—
Chelmsford, .	2,695	43	18	25	—	19	13	7	4	—
Concord, .	4,427	83	54	29	—	37	34	5	7	—
Dracut, .	1,996	49	22	27	—	13	25	3	8	—
Dunstable, .	416	5	3	2	—	2	2	1	—	—
Everett, .	11,068	534	285	249	—	187	219	60	61	7
Framingham, .	9,239	203	111	92	—	92	61	22	26	2
Groton, .	2,057	33	16	17	—	19	7	4	3	—
Holliston, .	2,619	58	27	31	—	27	6	7	8	10
Hopkinton, .	4,088	66	30	36	—	44	10	5	7	—
Hudson, .	4,670	131	68	63	—	60	44	13	14	—
Lexington, .	3,197	48	25	23	—	17	16	7	7	1
Lincoln, .	987	11	9	2	—	4	4	2	1	—
Littleton, .	1,025	26	11	15	—	13	7	2	4	—
Lowell, .	77,696	2,688	1,366	1,320	2	418	1,805	250	211	4
Malden, .	23,031	754	388	366	—	253	365	89	47	—
Marlborough, .	13,805	448	229	219	—	181	152	38	77	—
Maynard, .	2,700	83	41	40	2	23	30	14	16	—
Medford, .	11,079	333	181	152	—	140	124	38	31	—
Melrose, .	8,519	236	114	122	—	110	68	32	26	—
Natick, .	9,118	151	88	63	—	84	24	25	18	—
Newton, .	24,379	668	323	345	—	219	301	82	65	1
North Reading, .	874	21	10	11	—	11	7	—	3	—
Pepperell, .	3,127	98	46	52	—	48	27	14	9	—
Reading, .	4,088	100	50	50	—	41	45	10	4	—
Sherborn, .	1,381	20	12	8	—	6	8	3	3	—
Shirley, .	1,191	19	11	8	—	8	4	6	1	—
Somerville, .	40,152	1,408	735	673	—	487	611	167	142	1
Stoneham, .	6,155	108	61	47	—	52	28	17	11	—
Stow, .	903	15	10	5	—	7	5	2	1	—
Sudbury, .	1,197	15	9	6	—	13	1	—	1	—
Tewksbury, .	2,515	51	29	22	—	18	20	7	6	—
(State Almshouse),	—	86	47	39	—	13	37	31	5	—
Townsend, .	1,750	24	13	11	—	17	5	1	1	—
Tyngsborough, .	662	14	7	7	—	7	5	2	—	—
Wakefield, .	6,982	209	108	101	—	69	97	22	20	1
Waltham, .	18,707	580	290	290	—	186	257	74	61	2
Watertown, .	7,073	179	79	100	—	63	74	24	18	—
Wayland, .	2,060	24	13	11	—	10	6	3	5	—
Westford, .	2,250	57	34	23	—	25	17	11	4	—
Weston, .	1,664	36	20	16	—	12	17	2	5	—
Wilmington, .	1,213	45	23	20	2	14	17	10	4	—
Winchester, .	4,861	125	67	58	—	42	61	14	6	2
Woburn, .	13,499	438	244	194	—	115	238	39	46	—
<b>NANTUCKET, .</b>	<b>3,268</b>	<b>55</b>	<b>27</b>	<b>28</b>	<b>—</b>	<b>35</b>	<b>4</b>	<b>10</b>	<b>6</b>	<b>—</b>

Registered during the Year 1893 — Continued.

MARRIAGES.						DEATHS.								
Couples.	NATIVITY.					Persons.	SEX		NATIVITY.			No. whose Ages are registered.	AGE.	
	Am.	For.	Am. Groom.	For. Groom.	Unk.		M.	F.	Am.	For.	Unk.		Agg'te.	Av'ge.
3	3	-	-	-	-	29	12	17	26	2	1	-	-	-
28	10	11	4	3	-	73	34	39	54	19	-	-	-	-
60	21	29	4	5	1	144	72	72	98	45	1	-	-	-
3	2	-	1	-	-	12	6	6	10	2	-	-	-	-
14	9	2	3	-	-	56	33	23	42	12	2	-	-	-
3	3	-	-	-	-	15	10	5	15	-	-	-	-	-
4,373	1,798	1,572	543	460	-	9,420	4,722	4,698	6,637	2,656	127	9,394	313,494	33-37
24	11	5	3	5	-	25	21	4	21	4	-	-	-	-
53	21	17	9	11	-	123	64	59	91	31	1	-	-	-
3	3	-	-	-	-	19	12	7	19	-	-	-	-	-
17	7	3	2	5	-	45	25	20	38	7	-	-	-	-
19	16	1	1	1	-	49	27	22	33	16	-	-	-	-
4	2	2	-	-	-	19	11	8	14	5	-	-	-	-
12	5	5	2	-	-	38	24	14	25	13	-	-	-	-
13	5	4	3	1	-	43	24	19	34	9	-	-	-	-
5	3	1	-	1	-	1	-	1	1	-	-	-	-	-
2	2	-	-	-	-	12	3	9	10	2	-	-	-	-
721	261	298	87	75	-	1,653	835	818	1,162	473	13	-	-	-
2	2	-	-	-	-	9	2	7	8	1	-	-	-	-
27	14	3	7	3	-	64	29	35	50	13	1	-	-	-
35	12	17	2	4	-	70	36	34	55	14	1	-	-	-
11	2	5	1	3	-	38	18	20	25	12	1	-	-	-
4	4	-	-	-	-	4	3	1	4	-	-	-	-	-
131	65	40	13	13	-	265	116	149	204	53	3	-	-	-
71	33	13	10	15	-	143	70	73	103	39	1	-	-	-
10	8	1	-	1	-	30	17	13	29	1	-	-	-	-
22	15	1	2	4	-	72	32	40	56	15	1	-	-	-
27	23	1	1	2	-	61	30	31	46	14	1	-	-	-
34	20	6	3	5	-	107	49	58	84	23	-	-	-	-
26	12	8	4	2	-	59	24	35	47	11	1	-	-	-
3	3	-	-	-	-	9	7	2	8	1	-	-	-	-
2	1	1	-	-	-	22	11	11	20	2	-	-	-	-
961	264	476	128	93	-	2,108	1,015	1,093	1,350	702	56	-	-	-
239	118	109	42	20	-	484	255	229	362	117	5	-	-	-
108	62	16	15	15	-	241	124	117	181	60	-	-	-	-
29	9	12	4	4	-	48	22	26	29	13	1	-	-	-
90	43	23	6	13	-	212	100	112	166	42	4	-	-	-
104	50	23	14	12	-	148	69	79	118	29	1	-	-	-
61	40	7	6	8	-	148	71	77	109	38	1	-	-	-
262	89	117	28	23	-	447	245	202	331	110	6	-	-	-
5	3	1	-	1	-	17	10	7	16	1	-	-	-	-
21	14	2	2	3	-	69	32	37	52	17	-	-	-	-
33	20	4	5	4	-	77	34	43	69	8	-	-	-	-
3	3	-	-	-	-	22	11	11	17	5	-	-	-	-
11	7	2	1	1	-	40	22	18	31	8	1	-	-	-
439	211	129	53	46	-	300	300	410	567	230	3	-	-	-
49	31	9	8	1	-	94	50	44	73	21	-	-	-	-
3	1	1	1	-	-	15	8	7	11	4	-	-	-	-
4	4	-	-	-	-	25	12	13	23	2	-	-	-	-
9	4	2	2	1	-	37	21	16	26	10	1	-	-	-
-	-	-	-	-	-	270	188	82	87	173	10	-	-	-
19	17	1	-	1	-	28	12	16	24	4	-	-	-	-
7	3	3	-	1	-	14	7	7	12	2	-	-	-	-
86	40	24	14	8	-	144	71	73	108	33	3	-	-	-
213	99	65	31	18	-	347	163	189	255	90	2	-	-	-
64	26	30	3	5	-	136	65	71	91	43	2	-	-	-
7	4	1	1	1	-	37	18	19	31	6	-	-	-	-
19	6	7	4	2	-	55	22	33	45	8	2	-	-	-
19	8	6	5	-	-	20	10	10	15	4	1	-	-	-
9	3	2	1	3	-	14	5	9	13	-	1	-	-	-
44	16	18	7	3	-	99	51	48	73	25	1	-	-	-
122	48	45	12	17	-	244	134	110	165	77	2	-	-	-
21	13	-	1	2	-	83	47	41	81	5	2	33	4,990	56-70

TABLE I. — *Births, Marriages, and Deaths,*

COUNTIES AND TOWNS.	Population, U. S. Census, 1890.	BIRTHS.								
		Whole No.	SEX.			PARENTAGE.				
			M.	F.	Unk.	Am.	For.	Am. Fa. and For. Mo.	For. Fa. and Am. Mo.	Unk.
NORFOLK, . . .	118,950	3,132	1,604	1,523	-	1,229	1,272	298	318	15
Avon, . . .	1,334	38	21	17	-	33	1	3	1	-
Bellingham, . . .	1,334	38	22	16	-	16	11	4	7	-
Braintree, . . .	4,848	103	47	56	-	47	34	16	6	-
Brookline, . . .	12,103	365	192	173	-	123	170	37	35	-
Canton, . . .	4,538	122	67	55	-	46	42	11	23	-
Cohasset, . . .	2,448	39	18	21	-	19	11	2	6	1
Dedham, . . .	7,123	150	82	68	-	56	58	15	21	-
Dover, . . .	727	14	8	6	-	5	4	3	2	-
Foxborough, . . .	2,933	57	24	33	-	34	13	6	3	1
Franklin, . . .	4,831	133	69	64	-	61	35	15	21	1
Holbrook, . . .	2,474	63	31	32	-	39	8	8	8	-
Hyde Park, . . .	10,193	302	147	155	-	115	120	37	30	-
Medfield, . . .	1,493	20	7	13	-	16	1	1	2	-
Medway, . . .	2,985	41	25	16	-	29	4	3	5	-
Millis, . . .	786	31	15	16	-	16	7	5	2	1
Milton, . . .	4,278	82	47	35	-	33	34	7	8	-
Needham, . . .	3,035	69	36	33	-	17	31	9	12	-
Norfolk, . . .	913	23	10	13	-	13	7	1	2	-
Norwood, . . .	3,733	98	44	54	-	28	50	4	16	-
Quincy, . . .	16,723	716	359	357	-	162	449	44	52	9
Randolph, . . .	3,946	69	33	31	-	38	15	7	8	1
Sharon, . . .	1,634	26	16	10	-	12	7	4	2	1
Stoughton, . . .	4,852	132	64	68	-	69	34	16	13	-
Walpole, . . .	2,604	67	36	31	-	26	24	8	9	-
Wellesley, . . .	3,600	68	33	35	-	21	35	10	2	-
Weymouth, . . .	10,866	233	131	102	-	136	59	18	20	-
Wrentham, . . .	2,566	33	15	18	-	19	8	4	2	-
PLYMOUTH, . . .	92,700	2,144	1,069	1,074	1	1,166	573	196	193	16
Abington, . . .	4,260	75	33	42	-	58	10	3	4	-
Bridgewater, . . .	4,249	72	33	39	-	44	12	6	8	2
Brockton, . . .	27,294	777	386	391	-	329	288	64	89	7
Carver, . . .	994	16	4	12	-	10	1	1	4	-
Duxbury, . . .	1,908	29	9	20	-	20	4	2	3	-
East Bridgewater, . . .	2,911	67	35	32	-	34	19	8	5	1
Halifax, . . .	562	12	12	-	-	6	3	2	1	-
Hanover, . . .	2,093	39	20	19	-	30	3	3	3	-
Hanson, . . .	1,267	26	9	17	-	20	1	1	2	2
Hingham, . . .	4,564	110	49	61	-	56	23	17	12	2
Hull, . . .	989	19	14	5	-	9	2	4	4	-
Kington, . . .	1,659	26	13	13	-	13	5	5	3	-
Lakeville, . . .	935	14	7	7	-	13	1	-	-	-
Marion, . . .	871	13	11	2	-	13	-	-	-	-
Marshfield, . . .	1,713	13	7	6	-	11	1	-	1	-
Mattapoisett, . . .	1,148	10	5	5	-	6	2	2	-	-
Middleborough, . . .	6,065	143	67	76	-	82	45	12	4	-
Norwell, . . .	1,635	30	14	16	-	23	2	3	2	-
Pembroke, . . .	1,320	11	8	3	-	8	2	1	-	-
Plymouth, . . .	7,314	188	95	93	-	88	57	27	15	1
Plympton, . . .	597	8	6	2	-	7	-	1	-	-
Rochester, . . .	1,012	18	4	13	1	11	3	-	4	-
Rockland, . . .	5,213	121	66	55	-	83	22	8	7	1
Scituate, . . .	2,318	39	19	20	-	31	3	4	1	-
Wareham, . . .	3,451	89	48	41	-	52	26	4	7	-
West Bridgewater, . . .	1,917	26	17	9	-	15	6	3	2	-
Whitman, . . .	4,441	163	78	75	-	94	32	15	12	-
SUFFOLK, . . .	484,780	15,538	7,912	7,619	7	4,006	8,148	1,711	1,622	51
Boston, . . .	449,477	14,412	7,360	7,045	7	3,670	7,588	1,597	1,512	45
Chelsea, . . .	27,909	908	441	467	-	240	491	97	77	3
Revere, . . .	5,668	168	86	82	-	74	56	7	28	3
Winthrop, . . .	2,726	50	25	25	-	22	13	10	5	-

Registered during the Year 1893 — Continued.

MARRIAGES.						DEATHS.									
Couples.	NATIVITY.					Persons.	SEX.		NATIVITY.			No. whose Ages are registered.	AGE.		
	Am.	For.	Am. Groom.	For. Groom.	Unk.		M.	F.	Am.	For.	Unk.		Agg'te.	Av'ge.	
976	485	288	111	91	1	2,294	1,142	1,152	1,746	520	28	2,283	89,995	39-42	
8	4	1	2	-	1	31	19	12	28	8	-	-	-	-	
13	6	4	-	3	-	32	14	18	28	3	1	-	-	-	
47	33	8	4	2	-	102	49	53	84	18	-	-	-	-	
128	41	59	15	13	-	240	124	116	161	78	1	-	-	-	
34	16	10	3	5	-	110	57	53	70	37	3	-	-	-	
21	17	1	1	2	-	29	17	12	26	3	-	-	-	-	
45	21	12	8	4	-	123	63	60	86	33	4	-	-	-	
9	7	-	2	-	-	26	12	14	18	8	-	-	-	-	
24	17	3	3	1	-	50	23	27	47	3	-	-	-	-	
28	18	2	4	4	-	92	56	36	75	16	1	-	-	-	
15	12	-	2	1	-	36	18	18	27	9	-	-	-	-	
78	32	21	16	9	-	167	70	97	126	39	2	-	-	-	
15	13	-	1	1	-	27	13	14	23	3	1	-	-	-	
11	8	-	1	2	-	42	23	19	34	7	1	-	-	-	
12	10	2	-	-	-	21	12	9	17	3	1	-	-	-	
45	19	19	1	6	-	79	35	44	66	13	-	-	-	-	
25	9	10	2	4	-	58	26	32	47	11	-	-	-	-	
4	2	1	-	1	-	16	10	6	16	-	-	-	-	-	
41	20	13	1	7	-	70	33	37	58	10	2	-	-	-	
172	49	91	20	12	-	349	166	183	243	103	3	-	-	-	
17	14	1	-	2	-	76	42	33	52	22	1	-	-	-	
16	10	1	4	1	-	52	30	22	46	4	2	-	-	-	
37	24	5	4	4	-	115	50	65	99	13	1	-	-	-	
19	6	6	5	2	-	53	21	32	38	15	-	-	-	-	
25	10	8	6	1	-	52	23	29	32	18	2	-	-	-	
71	54	9	5	3	-	194	108	86	154	38	2	-	-	-	
16	13	1	1	1	-	53	28	25	45	8	-	-	-	-	
840	529	149	91	71	-	1,751	952	799	1,445	289	17	1,744	77,174	44-25	
34	33	-	1	-	-	79	38	41	69	10	-	-	-	-	
17	11	4	-	2	-	148	134	14	68	78	2	-	-	-	
318	157	89	41	31	-	476	246	230	394	78	4	-	-	-	
6	6	-	-	-	-	16	8	8	15	1	-	-	-	-	
10	5	1	1	3	-	45	21	24	41	4	-	-	-	-	
27	16	6	3	2	-	55	26	29	47	8	-	-	-	-	
6	4	1	1	-	-	12	7	5	12	-	-	-	-	-	
17	13	1	2	1	-	37	16	21	32	5	-	-	-	-	
10	8	-	1	1	-	26	15	11	24	2	-	-	-	-	
25	15	2	4	4	-	87	49	38	72	14	1	-	-	-	
3	3	-	-	-	-	14	9	5	10	3	1	-	-	-	
15	8	4	2	1	-	37	18	19	31	6	-	-	-	-	
7	7	-	-	-	-	12	7	5	12	-	-	-	-	-	
3	2	-	-	1	-	13	8	5	13	-	-	-	-	-	
6	5	-	1	-	-	19	11	8	19	-	-	-	-	-	
9	7	1	1	-	-	30	14	16	29	1	-	-	-	-	
60	46	7	4	3	-	106	48	58	93	13	-	-	-	-	
11	10	1	-	-	-	34	19	15	34	-	-	-	-	-	
6	6	-	-	-	-	23	11	12	22	1	-	-	-	-	
76	37	21	11	7	-	153	71	82	122	26	5	-	-	-	
6	2	-	1	2	-	16	7	9	13	1	2	-	-	-	
7	7	-	-	-	-	6	2	4	5	1	-	-	-	-	
39	27	5	5	2	-	75	49	26	59	16	-	-	-	-	
24	21	1	1	1	-	56	26	30	46	9	1	-	-	-	
26	21	2	1	2	-	54	31	23	43	5	1	-	-	-	
14	10	1	1	2	-	31	19	12	29	2	-	-	-	-	
59	42	2	9	6	-	91	42	49	86	5	-	-	-	-	
5,745	2,060	2,390	707	588	-	12,280	6,334	5,946	8,178	3,980	122	12,274	377,178	30-73	
5,376	1,900	2,277	654	545	-	11,516	5,911	5,605	7,631	3,770	115	-	-	-	
303	130	96	46	31	-	632	351	281	445	183	4	-	-	-	
41	20	10	3	8	-	92	52	40	69	20	3	-	-	-	
25	10	7	4	4	-	40	20	20	33	7	-	-	-	-	

TABLE I. — *Births, Marriages, and Deaths,*

COUNTIES AND TOWNS.	Population, U. S. Census, 1890.	BIRTHS.								
		Whole No.	SEX.			PARENTAGE.				
			M.	F.	Unk.	Am.	For.	Am. Fa. and For. Mo.	For. Fa. and Am. Mo.	Unk.
WORCESTER, .	280,787	8,006	4,412	4,276	8	2,852	4,013	856	925	50
Ashburnham, .	2,074	54	32	22	-	30	12	7	5	-
Athol, . . . .	6,319	160	86	74	-	88	37	11	22	2
Auburn, . . . .	1,532	27	12	15	-	11	10	2	4	-
Barre, . . . .	2,239	37	21	16	-	17	10	6	4	-
Berlin, . . . .	884	11	5	6	-	11	-	-	-	-
Blackstone, .	6,138	218	118	100	-	52	136	14	16	-
Bolton, . . . .	827	7	1	6	-	6	-	1	-	-
Boylston, . . .	770	12	8	4	-	8	4	-	-	-
Brookfield, . .	8,352	41	14	27	-	19	15	5	2	-
Charlton, . . .	1,847	28	14	24	-	26	6	1	4	1
Clinton, . . . .	10,424	357	180	177	-	71	194	36	45	11
Dana, . . . . .	700	13	5	8	-	8	3	-	2	-
Douglas, . . . .	1,908	52	28	24	-	18	22	4	8	-
Dudley, . . . .	2,944	87	41	46	-	16	43	11	17	-
Fitchburg, . . .	22,037	1,014	511	503	-	268	542	88	105	11
Gardner, . . . .	8,424	294	148	146	-	82	152	22	37	1
Grafton, . . . .	5,002	116	59	57	-	43	44	17	10	2
Hardwick, . . .	2,922	79	38	41	-	12	47	8	12	-
Harvard, . . . .	1,095	20	10	10	-	17	-	2	1	-
Holden, . . . .	2,623	59	28	31	-	20	26	6	7	-
Hopedale,* . . .	1,176	31	14	17	-	22	5	3	1	-
Hubbardston, . .	1,346	20	13	7	-	16	3	1	-	-
Lancaster, . . .	2,201	33	13	20	-	18	12	1	2	-
Leicester, . . .	3,120	70	40	30	-	33	19	10	8	-
Leominster, . . .	7,269	205	119	86	-	102	54	24	25	-
Lunenburg, . . .	1,146	18	8	10	-	14	2	2	-	-
Mendon, . . . .	919	20	13	7	-	18	1	3	3	-
Millford, . . . .	8,780	196	95	101	-	96	72	14	12	2
Millbury, . . . .	4,428	123	65	63	-	43	41	21	22	1
New Braintree, .	573	7	6	1	-	1	5	-	1	-
Northborough, .	1,952	42	24	18	-	17	13	6	6	-
Northbridge, . .	4,603	165	82	83	-	29	104	12	19	1
North Brookfield,	3,871	97	44	53	-	43	25	9	19	1
Oakham, . . . .	788	7	2	5	-	2	2	2	1	-
Oxford, . . . .	2,616	47	18	29	-	18	18	6	4	1
Paxton, . . . .	445	4	3	1	-	2	1	1	-	-
Petersham, . . .	1,050	11	7	4	-	7	3	-	1	-
Phillipston, . . .	502	5	3	2	-	4	-	1	-	-
Princeton, . . .	982	14	10	4	-	13	-	1	-	-
Royalston, . . .	1,080	6	5	1	-	4	2	-	-	-
Rutland, . . . .	980	24	10	14	-	14	5	2	3	-
Shrewsbury, . . .	1,449	25	9	16	-	18	3	3	1	-
Southborough, .	2,114	39	18	21	-	19	13	5	2	-
Southbridge, . .	7,655	232	145	135	2	60	132	37	50	3
Spencer, . . . .	8,747	239	119	118	2	77	89	25	46	2
Sterling, . . . .	1,244	27	16	11	-	19	1	5	2	-
Sturbridge, . . .	2,074	49	30	19	-	15	19	5	10	-
Sutton, . . . . .	3,180	106	55	51	-	32	46	16	12	-
Templeton, . . .	2,999	75	40	32	3	36	15	12	9	3
Upton, . . . . .	1,878	26	13	13	-	20	2	1	3	-
Uxbridge, . . . .	3,408	98	46	52	-	42	40	9	7	-
Warren, . . . .	4,681	143	78	65	-	60	52	19	11	1
Webster, . . . .	7,031	281	139	142	-	52	176	29	22	2
Westborough, . .	5,195	93	50	43	-	55	19	17	2	-
West Boylston, . .	3,019	108	50	58	-	31	50	12	15	-
West Brookfield, .	1,592	20	8	12	-	17	-	1	2	-
Westminster, . .	1,688	24	13	11	-	11	7	5	1	-
Winchendon, . .	4,390	121	67	54	-	49	49	11	12	-
Worcester, . . .	84,655	3,094	1,563	1,530	1	905	1,610	284	290	5

\* Incorporated April 7, 1886.

*Registered during the Year 1893 — Concluded.*

MARRIAGES.						DEATHS.									
Couples.	NATIVITY.					Persons.	Sex.		NATIVITY.			No. whose Ages are registered.	Age.		
	Am.	For.	Am. Groom.	For. Groom.	Unk		M.	F.	Am.	For.	Unk.		Agg'te.	Av'ge.	
2,655	1,274	845	266	267	3	5,677	2,802	2,875	4,188	1,412	77	5,656	200,929	35.53	
15	8	4	1	2	-	60	29	31	50	10	-	-	-	-	
60	48	9	5	7	-	108	55	53	86	21	1	-	-	-	
9	4	2	2	1	-	15	6	9	15	-	-	-	-	-	
17	12	-	3	2	-	37	17	20	35	2	-	-	-	-	
7	5	-	-	2	-	14	7	7	13	1	-	-	-	-	
72	26	33	7	6	-	130	72	58	76	52	2	-	-	-	
6	4	1	-	1	-	8	5	3	8	-	-	-	-	-	
10	7	-	2	1	-	16	6	10	14	2	-	-	-	-	
23	14	4	2	3	-	39	20	19	35	4	-	-	-	-	
20	16	2	2	-	-	25	13	12	22	1	2	-	-	-	
111	36	50	13	12	-	153	73	80	97	54	2	-	-	-	
2	2	-	-	-	-	8	4	4	7	1	-	-	-	-	
25	11	10	2	2	-	54	31	23	42	11	1	-	-	-	
17	6	7	3	1	-	50	26	24	32	17	1	-	-	-	
23	81	118	27	22	-	457	216	241	331	125	1	-	-	-	
9	38	44	7	5	-	178	95	83	140	37	1	-	-	-	
47	14	21	6	6	-	89	45	44	57	31	1	-	-	-	
23	11	9	6	2	-	48	26	22	42	6	-	-	-	-	
3	2	1	-	-	-	18	10	8	14	1	3	-	-	-	
19	11	3	3	2	-	49	32	17	35	13	1	-	-	-	
6	4	1	1	-	-	14	4	10	12	2	-	-	-	-	
3	3	-	-	-	-	32	20	12	27	4	1	-	-	-	
17	13	1	1	2	-	42	22	20	32	9	1	-	-	-	
24	12	6	2	4	-	64	35	29	38	22	4	-	-	-	
35	53	18	5	9	-	116	57	59	88	22	6	-	-	-	
9	9	-	-	-	-	18	8	10	17	1	-	-	-	-	
3	-	-	3	-	-	19	14	5	19	-	-	-	-	-	
60	40	17	7	5	-	200	109	91	143	56	1	-	-	-	
43	21	7	9	4	2	99	43	56	64	34	1	-	-	-	
1	-	-	-	1	-	10	5	5	7	-	3	-	-	-	
14	8	3	1	2	-	37	19	18	30	7	-	-	-	-	
44	12	19	6	7	-	110	46	64	78	32	-	-	-	-	
29	21	2	2	4	-	79	29	50	67	11	1	-	-	-	
3	5	1	1	1	-	13	3	10	11	2	-	-	-	-	
9	7	1	-	1	-	47	26	21	37	10	-	-	-	-	
3	3	-	-	-	-	7	4	3	4	1	2	-	-	-	
6	4	1	-	1	-	28	13	15	24	4	-	-	-	-	
3	3	-	-	-	-	10	5	5	9	-	1	-	-	-	
3	3	-	-	-	-	10	5	5	8	2	-	-	-	-	
7	7	-	-	-	-	37	20	17	34	2	1	-	-	-	
7	6	-	-	1	-	17	7	10	16	1	-	-	-	-	
6	5	-	-	1	-	20	5	15	19	1	-	-	-	-	
5	4	-	1	-	-	21	11	10	14	7	-	-	-	-	
71	26	16	16	13	-	148	82	66	106	42	-	-	-	-	
54	35	7	5	7	-	142	66	76	107	32	3	-	-	-	
8	7	1	-	-	-	32	18	14	29	2	1	-	-	-	
18	12	4	2	-	-	49	24	25	40	9	-	-	-	-	
32	17	6	4	5	-	76	30	46	59	14	3	-	-	-	
26	21	3	1	1	-	59	32	27	54	2	3	-	-	-	
17	15	1	-	1	-	38	19	19	25	12	1	-	-	-	
44	29	9	4	2	-	60	34	26	45	15	-	-	-	-	
29	16	5	4	4	-	84	40	44	67	17	-	-	-	-	
76	17	44	3	12	-	159	80	79	102	52	5	-	-	-	
40	23	7	3	2	-	111	52	59	85	26	-	-	-	-	
36	15	10	4	7	-	79	30	49	63	16	-	-	-	-	
11	11	-	-	-	-	22	9	13	20	2	-	-	-	-	
12	10	1	1	-	-	31	14	17	24	3	4	-	-	-	
42	21	12	2	7	-	90	43	47	74	16	-	-	-	-	
693	400	324	82	86	1	1,891	931	960	1,339	533	19	-	-	-	

TABLE II. — BIRTHS. — 1893.

*Distinguishing by Counties, by Months, and by Sex, the Registered Number of Children BORN ALIVE during the Year.*

Year and Months.	SEX.	STATE.	Barnstable.	Berkshire.	Bristol.	Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
THE YEAR.	Tot.	67,192	516	2,283	6,200	73	8,392	908	4,864	1,194	13,197	55	3,132	2,144	15,538	8,696
	Ma.	34,328	269	1,130	3,222	34	4,300	508	2,486	580	6,775	27	1,604	1,069	7,912	4,412
	Fe.	32,829	247	1,153	2,970	38	4,091	400	2,376	613	6,416	28	1,528	1,074	7,619	4,276
	Unk.	35	—	—	8	1	1	—	2	1	6	—	—	1	7	8
Jan.	Tot.	5,611	31	176	509	8	698	81	403	77	1,116	7	288	166	1,331	720
	Ma.	2,788	19	79	267	4	320	56	206	35	557	5	130	91	668	351
	Fe.	2,818	12	97	242	4	378	25	197	41	559	2	158	75	661	367
	Unk.	5	—	—	—	—	—	—	—	1	—	—	—	—	2	2
Feb.	Tot.	5,107	49	174	488	8	612	56	403	87	1,007	4	243	140	1,163	673
	Ma.	2,696	30	84	263	6	333	28	223	41	544	3	129	61	608	343
	Fe.	2,409	19	90	225	2	279	28	180	46	463	1	114	79	555	328
	Unk.	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
March.	Tot.	5,549	41	180	528	5	701	71	429	97	1,093	5	261	184	1,248	706
	Ma.	2,855	20	103	276	5	366	41	231	51	589	2	120	94	618	339
	Fe.	2,693	21	77	251	—	335	30	198	46	504	3	141	90	630	367
	Unk.	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—
April.	Tot.	5,391	34	166	553	6	659	96	410	127	1,024	2	254	172	1,148	740
	Ma.	2,743	16	85	282	3	315	54	195	58	528	1	144	84	590	388
	Fe.	2,646	18	81	271	3	344	42	214	69	495	1	110	88	558	352
	Unk.	2	—	—	—	—	—	—	1	—	1	—	—	—	—	—
May.	Tot.	5,163	44	199	499	4	637	69	389	92	978	4	199	179	1,134	736
	Ma.	2,677	17	94	245	2	339	49	199	45	498	1	109	100	592	387
	Fe.	2,480	27	105	254	2	298	20	190	47	477	3	90	79	541	347
	Unk.	6	—	—	—	—	—	—	—	—	3	—	—	—	1	2
June.	Tot.	5,457	40	188	437	1	703	72	398	102	1,138	4	261	168	1,232	713
	Ma.	2,740	19	101	216	—	358	35	210	51	550	2	130	82	626	360
	Fe.	2,716	21	87	221	1	345	37	188	51	587	2	131	86	606	353
	Unk.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
July.	Tot.	6,095	51	184	541	10	809	73	413	109	1,243	4	297	174	1,420	767
	Ma.	3,069	27	90	297	2	414	41	194	56	619	2	140	88	712	387
	Fe.	3,021	24	94	244	8	394	32	219	53	623	2	157	86	706	379
	Unk.	5	—	—	—	—	1	—	—	—	1	—	—	—	2	1





## SUPPLEMENT A.

## PLURALITY CASES.—1893.

(Included in Tables I. and II.)

	SEX.	STATE.	Barnstable.	Berkshire.	Bristol.	Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
THE YEAR.	Tot.	1,247	8	50	109	—	138	8	106	23	238	—	83	36	280	168
	Ma.	629	6	22	59	—	77	4	51	12	123	—	41	22	133	79
	Fe.	618	2	28	50	—	61	4	55	11	115	—	42	14	147	89
	Unk.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

NOTE.—Nine cases of triplets were registered in 1893. In Bristol County, 1 case, 3 males of foreign parentage. In Hampshire County, 1 case, 2 males and one female of American parentage. In Norfolk County, 1 case, 3 males of American parentage. In Suffolk County, 4 cases: one, 2 females and one male of American parentage; one, 3 males, unknown father and foreign mother; one, 2 females and one male, American father and foreign mother; and one, 2 females and 1 male of foreign parentage. In Worcester County, 2 cases: one, 3 males of American parentage; and one, 1 male and 2 females of American parentage.

## SUPPLEMENT B.

## ILLEGITIMATE BIRTHS.—1893.

(Included in Tables I. and II.)

	SEX.	STATE.	Barnstable.	Berkshire.	Bristol.	Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
THE YEAR.	Tot.	540	10	26	59	1	94	10	46	8	149	2	23	11	14	87
	Ma.	274	5	12	31	1	45	3	29	4	82	1	10	3	4	44
	Fe.	264	5	14	28	—	49	7	17	4	66	1	13	7	10	43
	Unk.	2	—	—	—	—	—	—	—	—	1	—	—	1	—	—

NOTE.—Of the illegitimate births registered in the foregoing table, 67 occurred in the State Almshouse at Tewksbury and 3 in the Reformatory Prison for Women at Sherborn.

TABLE III. — STILL-BORN.

*Distinguishing by Counties and by Sex the Registered Number of Still-births during the Year.*

1893.

		SEX.	STATE.	Barnstable.	Berkshire.	Bristol.	Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
THE YEAR.	{	Tot.	2,444	18	83	242	3	339	22	133	47	450	4	99	55	695	254
		Ma.	1,420	8	46	156	3	197	10	75	24	303	3	64	30	369	132
		Fe.	921	8	27	80	—	134	9	57	21	132	1	34	25	295	98
		Unk.	103	2	10	6	—	8	3	1	2	15	—	1	—	31	24

TABLE IV. — MARRIAGES.

*Distinguishing by Counties and by Months the Num.*

YEAR AND MONTH.	STATE.	Barnstable.	Berkshire.	Bristol.	Dukes.
THE YEAR, . . . . .	22,814	209	613	2,089	39
January, . . . . .	1,999	22	52	205	3
February, . . . . .	1,592	14	37	152	2
March, . . . . .	1,000	8	45	88	4
April, . . . . .	2,396	16	58	226	2
May, . . . . .	1,636	13	65	157	1
June, . . . . .	2,830	19	84	209	3
July, . . . . .	1,570	11	84	185	2
August, . . . . .	1,678	7	49	170	6
September, . . . . .	1,953	17	49	171	4
October, . . . . .	2,319	29	49	191	5
November, . . . . .	2,414	30	51	225	1
December, . . . . .	1,413	23	37	110	6
Unknown, . . . . .	14	—	3	—	—

TABLE IV.—MARRIAGES.

*ber of Marriages Registered during the Year 1893.*

Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
3,108	335	1,401	410	4,373	21	976	840	5,745	2,655
254	28	131	30	400	2	76	70	487	239
221	25	93	31	296	2	72	46	419	182
138	11	49	15	182	2	36	40	278	104
334	26	143	33	489	1	114	66	620	268
209	32	121	40	285	1	45	61	367	239
400	48	156	49	552	3	155	106	723	323
215	18	109	36	276	—	59	70	366	189
239	20	113	41	319	4	61	45	409	195
278	32	122	34	385	1	92	67	463	238
304	32	148	40	460	4	103	84	635	235
325	38	136	32	476	1	98	115	604	282
189	25	77	29	247	—	65	70	374	161
2	—	3	—	6	—	—	—	—	—

## TABLE V. — MARRIAGES.

STATE AND COUNTIES: *By Age Periods. — 1893.*

STATE AND COUNTIES.						ALL AGES.	Under 20.*	20 to 25.	25 to 30.
STATE TOTALS,									
Males,	.	.	.	.	.	22,814	441	8,151	7,476
Females,	.	.	.	.	.	22,814	3,628	10,112	5,307
Barnstable,									
Males,	.	.	.	.	.	209	7	67	68
Females,	.	.	.	.	.	209	52	77	42
Berkshire,									
Males,	.	.	.	.	.	613	25	228	181
Females,	.	.	.	.	.	613	133	242	140
Bristol,									
Males,	.	.	.	.	.	2,089	81	896	596
Females,	.	.	.	.	.	2,089	445	938	377
Dukes,									
Males,	.	.	.	.	.	39	—	13	11
Females,	.	.	.	.	.	39	10	15	8
Essex,									
Males,	.	.	.	.	.	3,108	81	1,123	986
Females,	.	.	.	.	.	3,108	522	1,352	690
Franklin,									
Males,	.	.	.	.	.	335	8	124	112
Females,	.	.	.	.	.	335	94	138	58
Hampden,									
Males,	.	.	.	.	.	1,401	29	577	464
Females,	.	.	.	.	.	1,401	286	636	303
Hampshire,									
Males,	.	.	.	.	.	410	14	153	130
Females,	.	.	.	.	.	410	84	155	93
Middlesex,									
Males,	.	.	.	.	.	4,373	60	1,472	1,522
Females,	.	.	.	.	.	4,373	574	2,001	1,077
Nantucket,									
Males,	.	.	.	.	.	21	—	7	4
Females,	.	.	.	.	.	21	3	8	5
Norfolk,									
Males,	.	.	.	.	.	976	14	323	325
Females,	.	.	.	.	.	976	129	417	256
Plymouth,									
Males,	.	.	.	.	.	840	25	320	240
Females,	.	.	.	.	.	840	177	336	180
Suffolk,									
Males,	.	.	.	.	.	5,745	40	1,774	2,040
Females,	.	.	.	.	.	5,745	640	2,596	1,513
Worcester,									
Males,	.	.	.	.	.	2,655	57	1,074	797
Females,	.	.	.	.	.	2,655	479	1,201	565

\* This includes 1 marriage of a female 13 years of age, 10 of 14, 46 of 15; 3 males and 159 females of 16, 14 males and 493 females of 17, 112 males and 1,292 females of 18, and 312 males and 1,627 females of 19.

TABLE V.—MARRIAGES.

STATE AND COUNTIES: *By Age Periods.—1893.*

25. 3 00	40. 35 30	45. 40 35	50. 45 40	55. 50 45	60. 55 50	65. 60 55	70. 65 60	75. 70 65	80. 75 70	Over 80.	Unknown.
3,212 1,862	1,510 935	753 470	482 223	310 133	201 78	128 39	84 18	47 4	13 1	4 —	2 4
22 17	11 6	11 5	10 5	4 —	4 3	3 —	1 1	1 1	— —	— —	— —
81 33	46 26	17 13	6 14	8 4	8 2	4 4	7 —	— 1	— —	2 —	— 1
209 139	125 93	67 55	55 23	26 11	22 5	5 2	4 —	2 —	1 —	— —	— 1
6 3	2 1	1 —	2 —	2 —	2 1	— 1	— —	— —	— —	— —	— —
444 284	208 133	105 73	59 19	42 19	21 8	14 3	13 5	9 —	2 —	1 —	— —
36 17	19 13	11 6	12 2	3 4	4 —	2 3	2 —	2 —	— —	— —	— —
162 86	75 45	35 19	24 10	11 8	11 5	7 3	5 —	1 —	— —	— —	— —
45 30	21 20	13 9	9 9	12 4	2 2	2 2	5 2	4 —	— —	— —	— —
613 373	304 159	150 90	98 48	63 21	36 20	26 5	12 3	13 1	4 1	— —	— —
6 2	— 1	2 2	1 —	— —	1 —	— —	— —	— —	— —	— —	— —
149 86	79 53	41 15	16 8	12 7	5 2	6 2	4 1	1 —	1 —	— —	— —
105 72	72 38	23 17	18 6	13 4	9 5	7 2	6 3	— —	1 —	1 —	— —
985 525	398 255	200 107	119 55	79 33	54 17	30 2	17 2	6 —	3 —	— —	— —
349 195	150 92	77 59	53 24	35 18	22 8	22 10	8 1	8 1	1 —	— —	2 2

[illegible]





**TABLE VI.—Concluded.**

**(D.) Subsequent Marriage of both Parties.**

[illegible]

TABLE VII. — DEATHS.

*Distinguishing by Counties, by Months, and by Sex, the Registered Number of Persons who Died during the Year.*

1893.

Year and Month.	SEX.	STATE.	Barnstable.	Berkshire.	Bristol.	Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
THE YEAR.	To.	49,084	592	1,505	4,008	115	6,064	654	2,999	1,037	9,420	88	2,294	1,751	12,280	5,677
	Ma.	24,899	308	757	2,410	68	3,026	333	1,480	518	4,722	47	1,142	952	6,334	2,802
	Fe.	24,185	284	748	2,198	47	3,038	321	1,519	519	4,698	41	1,152	799	5,946	2,875
Jan.	To.	4,161	42	115	399	12	523	46	252	102	819	11	191	138	1,063	448
	Ma.	2,027	20	50	204	5	238	24	131	49	397	4	90	65	543	207
	Fe.	2,134	22	65	195	7	285	22	121	53	422	7	101	73	520	241
Feb.	To.	3,714	42	99	317	13	524	53	246	77	682	2	179	128	952	400
	Ma.	1,905	21	47	158	9	266	28	124	37	332	—	98	75	503	207
	Fe.	1,809	21	52	159	4	258	25	122	40	350	2	81	53	449	193
March.	To.	4,375	53	137	352	4	578	63	263	94	826	8	209	208	1,083	497
	Ma.	2,230	25	72	186	2	284	31	132	47	428	4	98	125	547	249
	Fe.	2,145	28	65	166	2	294	32	131	47	398	4	111	83	536	248
April.	To.	4,335	45	151	375	11	562	48	260	78	818	9	193	176	1,126	483
	Ma.	2,253	21	76	207	7	275	24	133	42	440	6	105	87	582	248
	Fe.	2,082	24	75	168	4	287	24	127	36	378	3	88	89	544	235
May.	To.	4,321	47	119	352	12	553	46	264	88	842	13	209	159	1,046	571
	Ma.	2,231	19	57	183	9	308	24	128	50	397	8	106	86	571	285
	Fe.	2,090	28	62	169	3	245	22	136	38	445	5	103	73	475	286
June.	To.	3,250	42	89	297	5	387	50	197	62	592	3	170	126	829	401
	Ma.	1,654	26	41	152	1	193	22	84	30	301	1	88	71	439	205
	Fe.	1,596	16	48	145	4	194	28	113	32	291	2	82	55	390	196
July.	To.	4,356	43	115	513	8	519	36	306	59	864	5	174	154	1,051	509
	Ma.	2,309	27	64	272	7	272	20	156	34	463	3	78	79	571	263
	Fe.	2,047	16	51	241	1	247	16	150	25	401	2	96	75	480	246
Aug.	To.	4,934	62	175	514	8	611	72	307	102	960	6	214	161	1,127	615
	Ma.	2,545	34	94	278	4	311	40	148	48	486	3	114	96	594	295
	Fe.	2,389	28	81	236	4	300	32	159	54	474	3	100	65	533	320

TABLE VII. — Concluded.

Year and Months.	SEX.	STATE.	Barnstable.	Berkshire.	Bristol.	Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
Sept.	To.	4,055	42	125	404	9	534	87	234	99	737	4	180	119	988	493
	Ma.	1,991	18	71	214	6	251	37	116	46	358	1	82	56	494	241
	Fe.	2,064	24	54	190	3	283	50	118	53	379	3	98	63	494	252
Oct.	To.	3,679	48	97	365	10	421	44	205	79	673	14	184	113	1,005	421
	Ma.	1,831	26	51	178	4	206	21	100	33	338	11	102	60	502	199
	Fe.	1,848	22	46	187	6	215	23	105	46	335	3	82	53	503	222
Nov.	To.	3,480	45	122	331	13	380	49	190	88	712	4	178	110	869	389
	Ma.	1,720	19	58	168	7	189	27	94	39	338	3	85	63	436	194
	Fe.	1,760	26	64	163	6	191	22	96	49	374	1	93	47	433	195
Dec.	To.	4,424	81	161	389	10	472	60	275	109	895	9	213	159	1,141	450
	Ma.	2,203	52	76	210	7	233	35	134	63	444	3	96	89	552	209
	Fe.	2,221	29	85	179	3	239	25	141	46	451	6	117	70	589	241

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**DEATHS BY AGE AND SEX, AND  
BY COUNTIES.**

**1893.**

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TABLE VIII. — DEATHS BY AGE AND SEX,

*Distinguishing by Age and Sex the Number of Deaths registered in Each Population, distinguishing Sex, according to the Census of 1890,—and*

STATE AND COUNTIES.	Population. Census 1890.		Percentage of 10's to Pop- ulation.	No. of Deaths Regist'd 1893.	Und. 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15
Massachusetts, {	2,238,943	Tot.	2.19	49,084	10,990	2,430	1,132	789	595	1,422	741
	1,087,709	Ma.	.	24,899	5,958	1,277	593	383	316	664	341
	1,151,234	Fe.	.	24,185	5,032	1,153	534	406	279	758	400
Barnstable, . {	29,172	Tot.	2.03	592	69	7	1	3	6	10	4
	14,003	Ma.	.	308	36	2	—	3	3	2	—
	15,169	Fe.	.	284	33	5	1	—	3	8	4
Berkshire, . {	81,108	Tot.	1.86	1,505	318	62	31	26	18	44	26
	39,841	Ma.	.	757	179	37	15	13	12	23	9
	41,267	Fe.	.	748	139	25	16	13	6	21	17
Bristol, . {	186,465	Tot.	2.47	4,608	1,368	253	118	62	60	145	75
	90,066	Ma.	.	2,410	765	131	73	30	32	75	32
	96,399	Fe.	.	2,198	603	122	45	32	28	70	43
Dukes, . {	4,869	Tot.	2.63	115	7	2	1	—	1	1	—
	2,124	Ma.	.	68	6	1	1	—	1	1	—
	2,245	Fe.	.	47	1	1	—	—	—	—	—
Essex, . {	299,995	Tot.	2.02	6,064	1,298	275	148	103	80	165	80
	146,478	Ma.	.	3,026	696	153	78	49	40	70	29
	153,517	Fe.	.	3,038	602	122	70	54	40	95	51
Franklin, . {	38,610	Tot.	1.69	654	101	20	12	6	5	12	13
	19,452	Ma.	.	333	62	9	9	4	5	9	5
	19,168	Fe.	.	321	39	11	3	2	—	3	8
Hampden, . {	135,713	Tot.	2.20	2,999	834	145	70	40	30	77	48
	65,710	Ma.	.	1,480	463	77	26	19	15	25	17
	70,003	Fe.	.	1,519	371	68	44	21	15	52	31
Hampshire, . {	51,859	Tot.	1.99	1,037	181	42	17	17	11	28	20
	24,571	Ma.	.	518	90	21	10	3	4	15	10
	27,288	Fe.	.	519	91	21	7	14	7	13	10
Middlesex, . {	431,167	Tot.	2.18	9,420	2,115	502	204	144	102	284	150
	206,177	Ma.	.	4,722	1,154	271	106	65	58	135	78
	224,990	Fe.	.	4,698	961	231	98	79	44	149	72
Nantucket, . {	3,268	Tot.	2.69	88	8	3	1	1	—	2	—
	1,411	Ma.	.	47	2	3	1	1	—	1	—
	1,857	Fe.	.	41	6	—	—	—	—	1	—
Norfolk, . {	118,950	Tot.	1.92	2,294	415	82	38	29	23	74	39
	57,436	Ma.	.	1,142	218	48	15	17	11	36	18
	61,514	Fe.	.	1,152	197	34	23	12	12	38	21
Plymouth, . {	92,700	Tot.	1.88	1,751	257	55	23	23	14	53	29
	46,101	Ma.	.	952	148	28	11	10	7	25	15
	46,599	Fe.	.	799	109	27	12	13	7	28	14
Suffolk, . {	484,780	Tot.	2.53	12,280	2,709	706	361	251	186	374	159
	235,265	Ma.	.	6,334	1,460	370	201	132	98	179	78
	249,515	Fe.	.	5,946	1,249	336	160	119	88	195	81
Worcester, . {	280,787	Tot.	2.02	5,677	1,310	276	107	84	59	153	93
	139,074	Ma.	.	2,802	679	126	52	37	30	68	50
	141,713	Fe.	.	2,875	631	150	55	47	29	85	43

## AND BY COUNTIES — 1893.

County and in the State during the Year 1893,—in Connection with the also with the Percentage of the Registered Number of Deaths to the Population.

1,325	2,177	2,146	2,020	2,021	1,884	1,888	2,072	2,112	2,346	2,556	2,637	2,258	1,877	1,061	370	95	161
612	1,082	1,073	1,005	1,054	1,003	971	1,081	1,095	1,109	1,309	1,303	1,067	845	469	119	33	104
713	1,095	1,073	1,015	967	801	917	991	1,017	1,146	1,247	1,334	1,191	1,034	632	251	62	57
19	32	20	20	21	25	14	28	24	44	32	62	53	59	27	9	2	1
24	21	14	11	14	14	8	13	13	27	15	29	22	28	13	7	1	-
5	11	6	9	7	11	8	15	11	17	17	33	31	31	14	2	1	1
41	66	45	45	66	53	53	10	58	74	100	105	94	79	32	20	5	6
16	31	21	22	28	21	26	18	31	39	52	51	49	39	18	8	2	2
25	35	24	23	37	32	27	22	27	35	48	54	45	40	19	12	3	3
115	179	166	157	173	148	172	169	178	192	214	215	205	114	81	11	11	16
51	95	83	65	92	76	81	91	102	107	112	112	97	40	31	8	2	7
64	64	85	92	81	71	91	78	76	86	101	104	108	54	50	13	9	9
1	9	5	5	4	5	3	3	5	10	11	12	9	12	7	-	-	1
-	7	1	4	4	11	2	1	3	7	7	9	6	4	1	-	-	1
1	2	5	1	-	2	2	2	2	3	4	2	11	8	6	-	-	-
152	293	272	228	252	222	233	239	292	303	317	330	294	250	139	34	11	53
73	151	139	98	123	124	115	126	145	151	156	163	122	110	47	9	0	43
79	142	133	120	129	98	118	112	147	144	161	167	172	140	92	25	5	10
17	25	19	16	22	21	15	21	41	31	37	58	70	47	25	14	4	4
5	12	10	9	12	9	7	8	23	11	20	23	29	18	10	6	-	3
9	13	9	7	10	12	8	13	18	20	17	31	31	29	15	8	4	1
98	132	148	113	106	86	104	129	129	112	115	144	130	96	67	12	4	3
46	65	67	51	45	43	55	68	56	53	63	63	65	45	31	4	2	4
52	67	81	62	60	43	49	61	63	59	72	81	81	51	36	8	2	4
32	45	41	26	28	43	34	37	17	68	68	77	59	61	33	18	4	2
21	24	18	15	12	19	13	22	23	29	35	37	37	30	20	7	2	1
11	21	23	11	16	24	21	15	24	39	31	40	22	31	13	11	2	1
284	435	394	404	353	358	387	388	391	443	503	479	407	350	196	70	16	26
192	218	181	190	197	195	185	183	196	234	260	261	189	143	69	20	4	19
162	217	213	214	186	163	202	205	206	214	243	225	219	207	127	50	11	7
-	3	2	1	-	1	5	4	2	6	9	7	14	9	10	1	-	-
-	2	2	1	-	-	5	1	1	2	4	5	6	6	6	-	-	-
-	1	-	-	-	1	-	3	1	3	5	2	6	4	6	1	-	-
61	98	91	89	79	85	65	102	112	103	135	167	146	121	81	21	10	11
22	45	45	51	46	51	33	57	58	46	74	76	62	63	32	8	3	7
39	53	46	48	33	35	35	45	54	59	62	91	84	58	49	13	7	4
36	67	66	62	70	60	52	68	88	104	111	124	121	138	63	30	3	7
13	33	33	35	45	35	31	40	54	62	75	70	61	63	32	12	2	5
23	34	28	27	25	23	21	23	34	42	61	54	60	75	31	18	1	2
112	553	680	630	615	570	555	592	525	577	523	519	360	282	143	70	13	6
132	230	353	345	331	321	313	321	278	293	268	241	163	109	42	19	4	2
130	303	327	274	235	249	243	271	247	284	260	278	197	173	101	51	9	4
175	210	194	224	200	189	190	253	220	270	331	339	296	259	157	50	12	21
82	96	101	107	102	94	100	132	112	123	167	171	151	126	68	11	5	10
93	111	93	117	88	95	90	121	103	142	164	168	145	133	94	39	7	11

TABLE IX.—CAUSES OF

*Distinguishing by Months, by Age, and by Sex, the Registered  
(arranged), during*

CAUSES OF DEATH.	DEATHS.		January.	February.	March.	April.	May.	June.	July.	August.	September.
	SEX.	Totals.									
ALL CAUSES, . . .	Totals, .	49,084	4,161	3,714	4,375	4,335	4,321	3,250	4,358	4,934	4,055
	Males, .	24,899	2,027	1,905	2,230	2,253	2,231	1,654	2,309	2,545	1,991
	Females, .	24,185	2,134	1,809	2,145	2,082	2,090	1,596	2,047	2,389	2,064
ZYMOTIC DISEASES, . . .	Totals, .	8,739	—	—	—	—	—	—	—	—	—
	Males, .	4,415	249	218	249	281	274	222	663	872	503
	Females, .	4,324	280	193	285	245	285	241	566	784	557
I. 1. Miasmatic, . . .	Totals, .	8,232	—	—	—	—	—	—	—	—	—
	Males, .	4,122	229	203	216	245	237	192	639	854	484
	Females, .	4,110	263	177	260	221	267	232	550	771	539
Chicken-pox, . . .	Totals, .	5	—	—	—	—	—	—	—	—	—
	Males, .	2	1	—	—	—	—	—	—	—	—
	Females, .	3	1	—	—	—	1	—	—	—	—
1. Small pox, . . .	Totals, .	9	—	—	—	—	—	—	—	—	—
	Males, .	2	1	1	—	—	—	—	—	—	—
	Females, .	7	—	1	1	—	—	1	—	—	—
2. Measles, . . .	Totals, .	376	—	—	—	—	—	—	—	—	—
	Males, .	126	5	8	10	15	24	18	12	8	4
	Females, .	150	15	10	16	13	30	19	11	8	6
3. Scarlatina, . . .	Totals, .	810	—	—	—	—	—	—	—	—	—
	Males, .	391	49	42	45	48	46	27	28	15	14
	Females, .	419	61	34	55	30	45	36	18	19	20
4. Diphtheria, . . .	Totals, .	1,072	—	—	—	—	—	—	—	—	—
	Males, .	526	54	44	40	37	37	26	38	29	33
	Females, .	546	65	32	45	36	39	33	37	35	38
5. Cerebro Sp. Menin- gitis, . . .	Totals, .	121	—	—	—	—	—	—	—	—	—
	Males, .	56	4	4	6	7	8	5	3	3	5
	Females, .	65	4	4	2	4	8	10	7	6	4
6. Quinsy, etc., — — Parotitis, . . .	Totals, .	31	—	—	—	—	—	—	—	—	—
	Males, .	16	2	1	—	—	1	4	1	—	2
	Females, .	15	2	1	1	2	—	—	2	—	—
— Quinsy, . . .	Males, .	3	1	—	2	—	—	—	—	—	—
7. Croup, . . .	Totals, .	322	—	—	—	—	—	—	—	—	—
	Males, .	171	20	19	17	14	16	6	10	7	7
	Females, .	151	16	14	19	14	16	10	5	5	6
8. Whooping-cough, . . .	Totals, .	274	—	—	—	—	—	—	—	—	—
	Males, .	108	1	9	8	9	10	8	13	18	12
	Females, .	166	9	9	21	9	12	18	14	15	16
9. Typhoid Fever, . . .	Totals, .	750	—	—	—	—	—	—	—	—	—
	Males, .	425	37	22	15	29	19	23	28	42	50
	Females, .	325	20	21	19	16	16	18	11	26	57
10. Erysipelas, . . .	Totals, .	251	—	—	—	—	—	—	—	—	—
	Males, .	119	15	9	21	17	17	7	11	—	4
	Females, .	132	15	15	14	15	15	11	4	4	8
11. Puerperal Fever, . . .	Females, .	46	10	5	1	3	4	5	3	6	2

DEATH. — (*Nosological Arrangement.*)

*Number of Deaths from various Specified Causes (Nosologically the Year 1893.*

1,548	1,766	2,221	5,832	1,143	534	408	279	755	400	712	2,168	1,062	1,778	2,006	2,803	2,525	1,999	57
310	278	296	1,717	485	237	196	146	305	78	97	248	211	167	135	163	147	78	3
346	249	293	1,554	425	238	223	149	370	108	126	216	202	125	131	176	163	109	9
292	258	273	1,682	473	234	196	144	304	77	95	211	169	105	107	128	133	72	3
327	229	274	1,531	421	238	223	149	365	107	119	165	146	90	111	160	154	108	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	1	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	4	2	-	-	-	-	1	-	1	4	-	-	-	-	-	-	-
6	7	9	37	46	16	7	4	7	-	3	1	3	1	1	-	-	-	-
6	11	6	42	30	14	9	2	12	4	1	3	5	1	1	1	2	2	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	23	23	23	41	50	50	48	113	13	9	4	1	-	-	1	-	-	-
32	34	30	15	54	71	68	34	105	24	9	12	4	-	-	-	-	-	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55	73	66	34	33	38	76	57	129	24	11	10	4	6	2	2	-	-	-
74	62	50	27	65	33	93	66	149	27	12	12	6	3	2	1	1	-	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	3	4	11	6	5	5	3	2	9	6	3	1	2	1	-	-	-	-
9	5	3	19	3	9	6	2	13	4	3	6	1	1	-	-	-	-	-
1	2	2	3	2	3	3	1	2	1	-	1	-	-	-	-	-	-	-
2	2	3	1	2	3	-	-	3	1	-	1	-	1	-	1	2	-	-
-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	19	28	32	47	33	24	16	19	-	-	-	-	-	-	-	-	-	-
12	14	20	26	36	23	21	12	22	1	1	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	6	9	71	20	10	3	2	3	-	-	-	-	-	-	-	-	-	-
13	14	16	113	29	9	6	3	5	1	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	57	43	4	2	1	4	3	13	16	47	143	91	40	25	17	12	2	1
60	32	29	-	-	-	5	1	23	29	63	72	64	21	16	18	6	1	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9	9	23	3	1	-	1	-	4	4	6	14	12	11	19	10	10	-
11	7	13	34	2	-	1	4	1	-	4	10	9	10	16	13	19	9	-
2	3	1	-	-	-	-	-	-	-	2	25	14	4	-	-	-	-	-



TABLE IX. — Continued.

CAUSES OF DEATH.	DEATHS.		January.	February.	March.	April.	May.	June.	July.	August.	September.
	Sex.	Totals.									
I. 1. <i>Miasmatic</i> — Con.											
12. Carbuncle, . . . . .	Totals, .	6	-	-	-	-	-	-	-	-	-
	Males, .	5	-	1	1	-	-	1	1	1	-
	Females, .	1	-	-	-	1	-	-	-	-	-
13. Influenza, . . . . .	Totals, .	296	-	-	-	-	-	-	-	-	-
	Males, .	122	7	11	11	19	19	5	-	2	1
	Females, .	174	7	6	18	48	31	6	4	1	-
14. Dysentery, . . . . .	Totals, .	231	-	-	-	-	-	-	-	-	-
	Males, .	97	1	1	1	2	3	2	12	23	31
	Females, .	134	4	-	3	3	7	4	17	34	37
15. Diarrhoea, . . . . .	Totals, .	543	-	-	-	-	-	-	-	-	-
	Males, .	288	11	7	7	9	8	4	45	87	46
	Females, .	255	11	3	12	6	17	9	29	60	62
16. Cholera Infantum, . . . . .	Totals, .	2,704	-	-	-	-	-	-	-	-	-
	Males, .	1,423	7	9	10	11	8	36	409	590	257
	Females, .	1,281	8	4	7	7	10	33	358	518	263
17. Cholera, . . . . .	Totals, .	93	-	-	-	-	-	-	-	-	-
	Males, .	39	-	-	-	1	-	2	11	16	7
	Females, .	54	1	1	1	-	1	2	16	22	9
18. Ague, . . . . .	Totals, .	46	-	-	-	-	-	-	-	-	-
	Males, .	26	1	3	2	2	3	2	1	4	2
	Females, .	20	-	-	2	-	3	1	2	2	-
19. Remittent Fever, . . . . .	Totals, .	40	-	-	-	-	-	-	-	-	-
	Males, .	22	-	1	3	2	4	1	3	1	2
	Females, .	18	3	1	2	1	2	2	-	2	2
20. Rheumatism, . . . . .	Totals, .	303	-	-	-	-	-	-	-	-	-
	Males, .	155	12	11	17	23	14	15	13	8	7
	Females, .	148	11	16	21	18	10	14	12	8	9
I. 2. <i>Anthetic</i> , . . . . .	Totals, .	257	-	-	-	-	-	-	-	-	-
	Males, .	123	9	8	8	16	19	8	13	6	11
	Females, .	134	9	11	15	17	12	7	11	10	12
1. Syphilis, . . . . .	Totals, .	48	-	-	-	-	-	-	-	-	-
	Males, .	32	-	2	2	3	4	2	4	1	3
	Females, .	16	1	2	3	4	-	-	-	3	-
2. Strict. of Urethra, . . . . .	Males, .	5	1	-	-	-	1	-	2	-	-
3. Hydrophobia, . . . . .	Totals, .	2	-	-	-	-	-	-	-	-	-
	Males, .	1	1	-	-	-	-	-	-	-	-
	Females, .	1	-	-	-	-	-	-	-	1	-
4. Glanders, . . . . .	Males, .	1	1	-	-	-	-	-	-	-	-
5. Malig. Pustule, . . . . .	Females, .	1	-	-	-	-	-	-	1	-	-
6. Septicæmia, . . . . .	Totals, .	200	-	-	-	-	-	-	-	-	-
	Males, .	84	6	6	6	8	14	6	7	5	8
	Females, .	116	8	9	12	13	12	7	10	6	12
I. 3. <i>Dietic</i> , . . . . .	Totals, .	247	-	-	-	-	-	-	-	-	-
	Males, .	170	11	7	25	20	18	22	11	12	8
	Females, .	77	8	5	10	7	6	2	5	3	6
1. Privation, . . . . .	Males, .	2	-	1	-	-	-	-	-	-	-
2. Purpura and Scurvy, . . . . .	Totals, .	40	-	-	-	-	-	-	-	-	-
	Males, .	18	1	1	3	2	2	6	-	-	1
	Females, .	22	3	-	3	2	4	1	2	-	1
3. Delir. Tremens, . . . . .	Totals, .	29	-	-	-	-	-	-	-	-	-
	Males, .	23	-	2	1	4	3	3	1	1	2
	Females, .	6	-	-	-	2	1	1	-	-	-

### **Nosological Arrangement.**

October.	November.	December.	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	Over 80	Unknown.
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61
62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74
75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75

TABLE IX. — Continued.

CAUSES OF DEATH.	DEATHS.		January.	February.	March.	April.	May.	June.	July.	August.	September.
	Sex.	Totals									
I. 3. <i>Dietic</i> —Con.											
4. Intoxication, . . . . .	Totals, .	176	—	—	—	—	—	—	—	—	—
	Males, .	127	10	3	21	14	13	13	10	11	5
	Females, .	49	5	6	7	8	1	—	3	3	5
I. 4. <i>Parasitic</i> , . . . . .	Females, .	3	—	—	—	—	—	—	—	—	—
1. Thrush, . . . . .	Females, .	1	—	—	—	—	—	—	—	—	—
2. Worms, . . . . .	Females, .	2	—	—	—	—	—	—	—	—	—
CONSTITUTIONAL DISEASES, . . . . .	Totals, .	9,387	—	—	—	—	—	—	—	—	—
	Males, .	4,311	350	329	380	380	409	318	364	387	368
	Females, .	5,076	395	357	433	439	442	398	420	437	484
II. 1. <i>Diathetic</i> , . . . . .	Totals, .	2,015	—	—	—	—	—	—	—	—	—
	Males, .	727	52	62	73	63	63	58	59	45	50
	Females, .	1,288	108	82	108	93	105	98	99	120	125
1. Gout, . . . . .	—	—	—	—	—	—	—	—	—	—	—
2. Dropsy, . . . . .	Totals, .	161	—	—	—	—	—	—	—	—	—
	Males, .	67	5	6	6	6	3	7	4	5	2
	Females, .	94	10	5	7	8	12	5	8	9	11
3. Anæmia, . . . . .	Totals, .	199	—	—	—	—	—	—	—	—	—
	Males, .	85	4	8	13	7	7	4	4	4	7
	Females, .	114	7	11	10	11	9	11	8	8	7
4. Cancer, etc.,—											
— Can. of Bowels, . . . . .	Totals, .	23	—	—	—	—	—	—	—	—	—
	Males, .	8	—	2	—	—	1	—	2	—	—
	Females, .	15	1	1	2	1	2	3	1	1	—
— Can. of Breast, . . . . .	Females, .	83	4	3	4	4	8	6	10	9	11
— Can. of Kidney, . . . . .	Totals, .	4	—	—	—	—	—	—	—	—	—
	Males, .	3	—	—	—	—	1	—	—	—	—
	Females, .	1	1	—	—	—	—	—	—	—	—
— Can. of Liver, . . . . .	Totals, .	163	—	—	—	—	—	—	—	—	—
	Males, .	76	3	9	11	7	5	8	9	4	5
	Females, .	87	7	7	8	6	8	6	5	7	8
— Can. of Pancreas, . . . . .	Males, .	1	—	—	—	1	—	—	—	—	—
— Can. of Spleen, . . . . .	Totals, .	2	—	—	—	—	—	—	—	—	—
	Males, .	1	—	—	—	1	—	—	—	—	—
	Females, .	1	—	—	—	—	—	—	—	—	—
— Can. of Stomach, . . . . .	Totals, .	238	—	—	—	—	—	—	—	—	—
	Males, .	135	14	10	17	8	15	4	12	12	6
	Females, .	153	15	18	14	12	17	12	11	11	14
— Can. of Uterus, . . . . .	Females, .	154	15	6	18	9	9	11	6	19	13
— Can. (part not stated), . . . . .	Totals, .	791	—	—	—	—	—	—	—	—	—
	Males, .	260	18	22	20	21	20	27	19	16	24
	Females, .	531	42	32	39	41	36	39	47	48	57
— Epithelioma, . . . . .	Totals, .	24	—	—	—	—	—	—	—	—	—
	Males, .	18	1	1	1	—	2	3	—	1	1
	Females, .	6	—	—	3	—	—	—	—	2	—
5. Canker (Noma), . . . . .	Totals, .	7	—	—	—	—	—	—	—	—	—
	Males, .	2	—	2	—	—	—	—	—	—	—
	Females, .	5	1	1	—	—	—	—	—	—	—
6. Mortification, . . . . .	Totals, .	115	—	—	—	—	—	—	—	—	—
	Males, .	71	7	2	5	12	9	5	9	3	5
	Females, .	44	5	3	3	1	4	5	8	6	4

*Nosological Arrangement.*

October.	November.	December.	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	Over 80	Unknown.
9	7	11	-	-	-	-	-	-	-	-	18	38	36	17	12	5	1	-
5	7	5	-	-	-	-	-	-	-	-	2	17	9	12	7	2	-	-
1	1	1	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	1	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
385	301	340	693	124	55	30	30	48	46	227	824	667	444	410	371	230	105	7
444	423	404	504	120	58	29	20	58	103	319	1,057	764	544	527	441	309	125	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
76	59	67	26	4	2	-	2	6	3	4	20	39	71	142	189	139	78	2
124	113	113	15	3	2	2	1	3	5	19	44	96	207	325	287	195	82	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	6	4	3	1	1	-	1	3	-	-	2	7	5	9	12	11	12	-
8	6	5	3	1	1	-	-	-	1	4	4	3	9	17	17	17	17	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	7	12	22	3	1	-	1	1	2	1	5	5	7	11	12	9	5	-
10	12	10	9	1	1	1	1	1	2	13	17	14	10	10	17	11	6	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	2	-	-	-	-	-	-	-	-	-	-	1	3	2	1	1	-
1	-	2	-	-	-	-	-	-	-	-	-	2	3	1	6	2	1	-
13	8	3	-	-	-	-	-	-	-	-	1	5	15	30	19	11	2	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	1	-	-	-	-	-	-	-	-	1	-	1	-	1	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
4	6	5	-	-	-	-	-	-	-	-	-	4	14	13	28	15	2	-
6	7	10	1	-	-	-	-	-	1	-	-	7	9	25	24	11	9	-
-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	13	15	-	-	-	-	-	-	-	-	-	8	17	34	52	20	4	-
9	14	11	-	-	-	-	-	-	-	-	2	7	18	52	37	32	5	-
20	12	16	-	-	-	-	-	-	-	1	6	25	41	45	26	10	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	19	21	-	-	-	-	-	-	1	3	11	14	23	58	68	51	29	2
51	49	50	-	-	-	-	-	1	1	1	11	32	98	138	132	83	32	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	2	3	-	-	-	-	-	-	-	-	-	-	1	6	-	7	4	-
-	-	1	-	-	-	-	-	-	-	-	-	-	1	2	-	2	1	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	1	1	2	1	-	1	-	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	6	4	-	-	-	-	-	1	-	-	1	1	1	8	13	25	21	-
2	4	4	-	-	-	-	-	1	-	-	2	1	2	4	9	16	9	-

**TABLE IX.—Continued.**

			June.	July.	August.	September.					
			60	305	342	318					
			00	321	317	334					
			2	5	4	5					
			5	4	3	2					
			-	-	-	-					
			-	3	1	3					
			-	-	-	-					
			1	-	2	-					
			33	49	88	89					
			39	112	76	90					
			-	-	-	-					
			54	225	230	204					
			39	233	212	233					
			-	-	-	-					
			31	23	30	19					
			16	19	21	31					
			-	-	-	-					
LOCAL DISEASES, . . . . .	Males, . . . . .	12,003	1,098	1,032	1,289	1,263	1,194	778	848	861	771
	Females, . . . . .	11,468	1,162	996	1,121	1,142	1,089	726	797	856	774
	Totals, . . . . .	6,307	-	-	-	-	-	-	-	-	-
III. 1. Nervous System, . . . . .	Males, . . . . .	3,229	278	249	288	323	290	212	279	301	258
	Females, . . . . .	3,078	278	230	280	275	262	210	266	279	256
	Totals, . . . . .	1,671	-	-	-	-	-	-	-	-	-
1. Cephalitis, . . . . .	Males, . . . . .	841	68	69	90	83	80	55	79	77	71
	Females, . . . . .	730	60	54	63	65	60	50	66	76	76
	Totals, . . . . .	1,656	-	-	-	-	-	-	-	-	-
2. Apoplexy, . . . . .	Males, . . . . .	700	62	67	69	114	64	54	56	62	51
	Females, . . . . .	895	80	72	78	67	81	61	73	63	61
	Totals, . . . . .	1,210	-	-	-	-	-	-	-	-	-
3. Paralysis, . . . . .	Males, . . . . .	598	55	44	55	60	56	34	50	54	40
	Females, . . . . .	612	54	43	49	57	51	35	56	56	51
	Totals, . . . . .	272	-	-	-	-	-	-	-	-	-
4. Insanity, . . . . .	Males, . . . . .	163	10	17	10	13	11	12	20	15	12
	Females, . . . . .	119	12	9	9	9	14	6	9	16	13
5. Chorea, . . . . .	- . . . .	-	-	-	-	-	-	-	-	-	-
	Totals, . . . . .	136	-	-	-	-	-	-	-	-	-
6. Epilepsy, . . . . .	Males, . . . . .	80	16	-	6	8	9	6	6	11	7
	Females, . . . . .	55	2	4	7	6	3	7	3	6	4
	Totals, . . . . .	36	-	-	-	-	-	-	-	-	-
7. Tetanus, . . . . .	Males, . . . . .	27	1	1	1	-	3	1	2	6	1
	Females, . . . . .	9	-	-	1	-	1	1	-	1	-
	Totals, . . . . .	383	-	-	-	-	-	-	-	-	-
8. Convulsions, . . . . .	Males, . . . . .	466	41	35	39	50	53	31	29	49	39
	Females, . . . . .	417	33	22	35	43	35	36	44	46	29
9. Brain Diseases, etc.,—	- . . . .	-	-	-	-	-	-	-	-	-	-
	Totals, . . . . .	312	-	-	-	-	-	-	-	-	-
— Brain Disease, . . . . .	Males, . . . . .	176	17	6	16	24	13	9	28	17	12
	Females, . . . . .	136	27	14	12	6	9	5	10	11	13

Nosological Arrangement.

October.	November.	December.	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	Over 80	Unknown.
309	242	273	667	120	53	80	28	42	43	223	804	628	373	268	182	91	27	5
320	310	291	579	117	56	27	19	55	98	300	1,013	668	337	202	154	114	43	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	2	5	11	4	-	1	2	-	2	5	-	1	2	2	6	2	2	-
-	6	1	5	1	4	1	-	1	2	2	-	4	3	4	6	2	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	1	2	-	-	-	-	-	-	-	1	2	-	2	2	-	1	-
-	1	-	1	-	-	-	-	-	-	-	7	2	1	-	2	1	1	-
1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-
2	-	2	-	-	-	-	-	-	-	1	2	2	1	2	1	1	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
82	30	40	467	83	12	5	3	7	4	7	11	11	3	3	13	11	9	3
67	43	38	409	47	10	7	1	5	2	6	16	7	10	8	19	19	21	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
197	193	211	53	20	11	1	10	19	31	206	782	608	366	259	161	78	15	2
232	242	235	64	18	17	9	7	34	86	289	982	650	319	187	125	90	21	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	17	16	129	63	30	23	13	16	6	5	10	6	2	2	-	-	-	-
18	19	15	100	51	25	10	11	15	8	2	6	3	3	-	1	-	-	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
812	863	1,194	1,999	617	273	129	117	239	160	203	696	862	1,115	1,430	1,783	1,657	700	23
774	837	1,191	1,652	552	215	135	102	279	172	231	701	832	1,012	1,226	1,604	1,696	1,040	26
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
232	240	281	680	247	102	38	46	70	32	36	111	170	207	317	453	495	216	9
241	231	270	521	201	83	42	48	87	37	41	95	145	212	317	405	519	320	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
56	50	65	324	158	66	25	31	49	17	19	31	29	23	23	22	19	4	1
53	51	46	247	121	46	27	35	65	22	23	30	27	23	23	17	14	10	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
75	60	76	5	-	-	-	-	-	1	2	18	49	62	135	213	198	74	3
79	67	93	5	1	1	-	1	1	2	4	19	35	86	159	204	227	148	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	56	48	5	1	-	-	2	2	-	2	11	43	65	75	131	169	91	1
51	50	50	3	4	2	-	1	3	2	1	7	25	49	73	114	195	131	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	16	9	-	-	-	-	-	-	-	-	10	8	17	29	35	37	17	-
9	6	6	-	-	-	-	-	-	-	-	5	14	12	18	31	26	13	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	3	7	4	2	-	-	1	-	5	4	10	19	8	15	4	5	2	1
5	3	7	1	1	1	-	-	1	4	4	7	7	4	12	5	7	1	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	1	4	5	-	-	-	-	1	3	5	7	2	1	3	-	-	-	-
1	2	2	1	1	-	-	1	1	-	-	1	3	-	-	-	1	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	28	47	317	74	30	10	10	13	3	-	2	2	3	1	-	1	-	-
23	29	32	245	68	32	15	10	12	5	3	7	10	6	1	1	1	-	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	15	13	19	12	6	3	2	5	3	4	21	12	20	16	17	24	10	2
11	15	11	19	5	1	-	-	4	1	5	14	15	19	17	11	18	7	-

TABLE IX. — Continued.

																July.	August.	September.
				Totals, .	124	-	-	-	-	-	-	-	-	-	-	-	-	-
— Softening of Brain, .				Males, .	68	8	6	8	7	7	7	7	6	6	5	5	5	5
				Females, .	56	10	7	5	8	3	3	3	1	4	3	3	3	3
				Totals, .	63	-	-	-	-	-	-	-	-	-	-	-	-	-
— Locomo. Ataxia, .				Males, .	42	4	2	1	4	3	3	3	4	3	6	6	6	6
				Females, .	21	1	2	1	2	3	3	1	2	1	2	2	2	2
				Totals, .	48	-	-	-	-	-	-	-	-	-	-	-	-	-
— Neuralgia, . . .				Males, .	18	-	3	4	-	1	1	1	1	2	2	2	2	2
				Females, .	28	4	3	-	1	3	3	2	1	4	4	4	4	4
III. 2. <i>Organs of Circulation,</i> .				Totals, .	3,937	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	1,906	165	165	165	176	214	173	155	121	127	127	127	127	127
				Females, .	1,939	168	163	194	167	168	186	150	166	186	186	186	186	186
1. Pericarditis, . . .				Totals, .	194	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	95	10	8	6	12	15	7	7	3	4	4	4	4	4
				Females, .	99	8	8	7	9	10	12	8	7	13	13	13	13	13
2. Aneurism, . . .				Totals, .	47	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	34	1	4	4	4	3	2	-	2	1	1	1	1	1
				Females, .	13	1	2	-	2	1	-	2	1	-	-	-	-	-
3. Heart Disease, etc.,—				Totals, .	99	-	-	-	-	-	-	-	-	-	-	-	-	-
— Angina Pectoris, .				Males, .	57	6	8	5	3	3	3	4	5	1	1	1	1	1
				Females, .	42	6	6	2	3	2	4	2	2	2	2	2	2	2
— Embolism, . . .				Totals, .	80	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	33	2	1	3	2	4	4	-	2	2	2	2	2	2
				Females, .	47	4	3	4	7	3	3	2	7	4	4	4	4	4
— Heart Disease, . .				Totals, .	3,511	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	1,778	166	142	167	154	187	167	144	109	119	119	119	119	119
				Females, .	1,733	162	142	178	146	182	186	136	139	115	115	115	115	115
— Phlebitis, . . .				Totals, .	6	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	1	-	-	-	-	-	-	-	-	-	-	-	-	-
				Females, .	5	-	2	1	-	-	2	-	-	-	-	-	-	-
III. 3. <i>Respiratory Organs,</i> .				Totals, .	7,890	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	4,004	452	474	552	575	470	205	168	127	149	149	149	149	149
				Females, .	3,796	456	402	457	502	428	180	146	108	128	128	128	128	128
1. Epistaxis, . . .				Females, .	2	-	-	-	1	-	-	-	1	-	-	-	-	-
2. Laryngitis, . . .				Totals, .	129	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	92	8	12	10	7	3	4	4	3	7	7	7	7	7
				Females, .	36	2	3	4	6	3	-	4	4	3	3	3	3	3
3. Bronchitis, . . .				Totals, .	1,738	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	824	84	98	116	99	82	39	40	33	37	37	37	37	37
				Females, .	914	114	101	126	106	86	47	39	36	44	44	44	44	44
4. Pleurisy, etc.,—				Totals, .	3	-	-	-	-	-	-	-	-	-	-	-	-	-
— Hydrothorax, . .				Males, .	1	-	-	-	-	-	-	-	-	-	-	-	-	-
				Females, .	2	-	-	1	-	-	-	-	-	-	-	-	-	-
— Pleuritis, . . .				Totals, .	197	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	104	9	10	9	15	19	6	6	3	9	9	9	9	9
				Females, .	93	5	9	12	9	16	7	7	3	8	8	8	8	8
5. Pneumonia, . . .				Totals, .	6,499	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	2,926	338	343	394	437	356	146	106	71	74	74	74	74	74
				Females, .	3,573	322	269	296	363	303	121	84	59	73	73	73	73	73
6. Asthma, . . .				Totals, .	112	-	-	-	-	-	-	-	-	-	-	-	-	-
				Males, .	57	4	5	11	7	4	3	3	4	4	4	4	4	4
				Females, .	55	2	3	8	3	5	3	3	4	4	4	4	4	4

Nosological Arrangement.

October.	November.	December.	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	Over 80	Unknown.
1	8	6	-	-	-	-	-	-	-	-	-	2	4	7	13	28	18	1
2	2	8	-	-	-	-	-	-	-	1	1	1	6	8	16	14	9	-
6	1	5	-	-	-	-	-	-	-	-	-	2	1	9	15	10	5	-
1	4	2	-	-	-	-	-	-	-	-	-	3	2	6	4	5	1	-
1	2	1	1	-	-	-	-	-	-	-	1	2	3	4	3	4	-	-
1	2	4	-	-	-	-	-	-	1	-	4	5	5	-	2	11	-	-
147	158	193	72	8	4	1	2	25	47	29	98	142	194	305	458	445	170	3
123	145	184	77	5	2	3	9	42	46	39	119	160	214	243	366	337	222	6
7	4	12	2	-	-	-	-	6	5	4	10	11	8	17	16	8	8	-
5	6	9	2	1	-	-	1	11	10	6	11	12	9	8	11	13	4	-
3	5	3	1	-	-	-	-	-	-	-	2	3	10	5	10	2	1	-
1	3	-	1	-	-	-	-	1	-	-	1	-	4	1	5	-	-	-
4	6	9	-	-	-	-	-	-	-	1	-	3	-	-	-	-	-	-
4	4	4	-	-	-	-	1	-	-	-	1	1	6	10	14	19	3	-
1	5	5	2	-	-	-	-	-	-	1	1	-	3	6	10	8	2	-
2	1	5	-	-	-	-	-	1	-	1	9	9	6	8	9	5	4	-
131	138	164	67	8	4	1	2	19	42	23	77	125	169	266	408	408	156	3
111	131	166	74	4	2	3	7	29	36	32	95	137	189	226	333	353	208	5
1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	2	1	-	1	-	1	-	-
185	244	502	762	297	125	68	42	78	27	78	309	373	455	474	487	340	175	4
191	249	552	656	281	98	66	34	94	41	76	215	258	264	345	480	513	365	11
-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-
10	5	7	14	14	7	8	6	3	1	1	5	9	9	3	2	-	-	-
4	2	3	6	3	4	4	1	2	-	1	4	7	3	2	-	1	-	-
42	55	102	329	92	29	17	11	10	2	3	25	22	24	63	78	68	50	1
33	45	118	273	89	25	17	7	13	5	5	25	29	26	55	89	140	115	1
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-
6	6	7	5	6	3	3	-	2	-	5	25	14	13	13	10	5	-	-
3	14	7	4	2	3	1	3	4	3	4	16	13	9	12	9	8	1	1
116	169	374	398	183	86	39	24	62	23	67	232	314	368	361	373	257	118	2
121	176	395	358	186	62	44	20	72	31	64	152	199	211	248	348	338	232	8
3	4	5	7	1	-	1	1	1	-	-	4	3	4	14	14	5	1	1
2	4	9	2	-	1	-	1	-	-	-	1	1	5	10	12	10	11	1



TABLE IX. — Continued.

CAUSES OF DEATH.	DEATHS.		January.	February.	March.	April.	May.	June.	July.	August.	September.
	Sex.	Totals.									
III. 3. <i>Respiratory Organs</i> — Con.											
7. Lung Diseases, . . . . .	Totals, .	219	—	—	—	—	—	—	—	—	—
	Males, .	100	9	11	10	10	6	5	8	13	9
	Females, .	119	11	13	10	14	14	2	9	7	4
III. 4. <i>Digestive Organs</i> , . . . . .	Totals, .	2,993	—	—	—	—	—	—	—	—	—
	Males, .	1,386	82	90	108	87	92	98	151	193	163
	Females, .	1,607	124	115	98	120	127	103	157	245	174
1. Gastritis, . . . . .	Totals, .	300	—	—	—	—	—	—	—	—	—
	Males, .	121	8	10	8	13	10	13	15	17	8
	Females, .	179	16	8	12	17	12	12	17	24	21
2. Enteritis, . . . . .	Totals, .	1,096	—	—	—	—	—	—	—	—	—
	Males, .	551	33	23	24	23	23	23	73	106	95
	Females, .	542	29	25	21	18	31	31	60	128	99
3. Peritonitis, . . . . .	Totals, .	591	—	—	—	—	—	—	—	—	—
	Males, .	214	11	17	21	17	15	20	19	25	19
	Females, .	377	38	38	20	47	44	21	30	46	21
4. Ascites, . . . . .	Totals, .	25	—	—	—	—	—	—	—	—	—
	Males, .	9	—	—	2	2	2	—	—	—	1
	Females, .	16	—	3	1	2	3	—	2	1	2
5. Ulceration of Intestines, . . . . .	Totals, .	17	—	—	—	—	—	—	—	—	—
	Males, .	10	—	2	—	1	1	2	3	—	1
	Females, .	7	—	1	2	—	—	—	1	2	—
6. Hernia, . . . . .	Totals, .	74	—	—	—	—	—	—	—	—	—
	Males, .	29	1	3	8	3	3	1	1	—	2
	Females, .	45	10	5	3	4	4	5	5	1	4
7. Ileus, . . . . .	Totals, .	143	—	—	—	—	—	—	—	—	—
	Males, .	77	8	6	4	4	6	6	6	10	8
	Females, .	66	3	6	5	6	4	4	6	10	6
8. Intussusception, . . . . .	Totals, .	28	—	—	—	—	—	—	—	—	—
	Males, .	12	—	2	1	1	—	3	—	3	1
	Females, .	16	—	2	1	1	1	2	2	2	—
9. Stricture of Intestines, —											
— Stricture of Bowels, . . . . .	Totals, .	12	—	—	—	—	—	—	—	—	—
	Males, .	8	—	—	1	—	1	1	—	—	1
	Females, .	6	—	—	—	1	—	1	—	—	—
— Strict. of Oesophagus, . . . . .	Totals, .	5	—	—	—	—	—	—	—	—	—
	Males, .	3	—	—	—	—	—	1	—	1	—
	Females, .	2	—	—	—	—	—	1	1	—	—
10. Fistula, . . . . .	Females, .	2	1	—	—	—	—	—	—	—	—
11. Stomach Diseases, etc., —											
— Bowel Disease, . . . . .	Totals, .	77	—	—	—	—	—	—	—	—	—
	Males, .	46	1	5	5	2	3	5	2	8	4
	Females, .	31	1	3	3	3	1	1	3	3	4
— Dyspepsia, . . . . .	Totals, .	21	—	—	—	—	—	—	—	—	—
	Males, .	7	—	—	1	—	—	1	2	1	—
	Females, .	14	—	1	1	2	—	—	3	2	—
— Stomach Disease, . . . . .	Totals, .	31	—	—	—	—	—	—	—	—	—
	Males, .	40	6	3	4	2	3	8	7	7	1
	Females, .	35	5	4	1	1	2	5	2	2	3
12. Pancreas Disease, . . . . .	Females, .	3	—	—	—	1	—	2	—	—	—
13. Hepatitis, . . . . .	Totals, .	87	—	—	—	—	—	—	—	—	—
	Males, .	37	2	2	3	2	4	5	3	—	3
	Females, .	50	2	7	5	3	9	—	3	2	3



TABLE IX.—Continued.

CAUSES OF DEATHS.	DEATHS.		January.	February.	March.	April.	May.	June.	July.	August.	September.
	Sex.	Totals.									
III. 4. Digestive Organs—Con.											
14. Jaundice, . . . . .	Totals, . . . . .	91	—	—	—	—	—	—	—	—	—
	Males, . . . . .	47	2	5	2	7	1	6	2	5	5
	Females, . . . . .	44	3	4	3	3	3	3	4	5	5
15. Liver Disease, . . . . .	Totals, . . . . .	337	—	—	—	—	—	—	—	—	—
	Males, . . . . .	165	10	12	21	10	20	9	15	10	14
	Females, . . . . .	172	16	9	11	12	13	17	19	14	14
16. Spleen Disease, . . . . .	—	—	—	—	—	—	—	—	—	—	—
III. 5. Urinary Organs, . . . . .	Totals, . . . . .	2,049	—	—	—	—	—	—	—	—	—
	Males, . . . . .	1,193	95	97	97	97	113	80	90	108	78
	Females, . . . . .	856	91	70	98	66	67	63	68	62	67
1. Nephritis (Bright's Disease, etc.), . . . . .	Totals, . . . . .	1,343	—	—	—	—	—	—	—	—	—
	Males, . . . . .	741	64	64	61	67	66	49	69	61	43
	Females, . . . . .	607	64	60	69	48	41	43	46	43	46
2. Ischuria, . . . . .	Totals, . . . . .	3	—	—	—	—	—	—	—	—	—
	Males, . . . . .	2	—	—	—	—	—	—	1	—	—
	Females, . . . . .	1	—	—	—	—	—	—	—	—	—
3. Diabetes, . . . . .	Totals, . . . . .	214	—	—	—	—	—	—	—	—	—
	Males, . . . . .	104	8	8	6	14	14	6	7	11	6
	Females, . . . . .	110	12	9	12	9	11	7	4	5	10
4. Gravel, etc., . . . . .	Totals, . . . . .	11	—	—	—	—	—	—	—	—	—
	Males, . . . . .	4	—	—	—	1	1	—	1	—	—
	Females, . . . . .	7	—	2	2	—	1	1	—	—	—
5. Cystitis, . . . . .	Totals, . . . . .	146	—	—	—	—	—	—	—	—	—
	Males, . . . . .	123	7	9	5	13	12	9	14	18	9
	Females, . . . . .	23	1	3	—	—	1	5	—	4	1
6. Kidney Diseases, etc.,—											
—Kidney Disease, . . . . .	Totals, . . . . .	289	—	—	—	—	—	—	—	—	—
	Males, . . . . .	171	11	12	20	7	15	16	7	16	17
	Females, . . . . .	118	14	6	15	9	13	7	9	10	10
—Disease of Prostate, . . . . .	Males, . . . . .	48	5	4	5	5	4	1	1	2	6
III. 6. Generative Organs, . . . . .	Females, . . . . .	76	3	7	16	7	6	6	6	4	5
1. Ovarian Dropsy, . . . . .	Females, . . . . .	38	3	4	4	—	5	4	3	2	4
2. Uterine Diseases, etc.,—											
—Uterine Disease, . . . . .	Females, . . . . .	34	—	3	6	6	—	4	3	1	1
—Metritis, . . . . .	Females, . . . . .	4	—	—	—	1	1	—	—	1	—
III. 7. Organs of Locomotion, . . . . .	Totals, . . . . .	101	—	—	—	—	—	—	—	—	—
	Males, . . . . .	52	3	3	7	3	7	3	3	3	3
	Females, . . . . .	49	3	4	5	1	5	2	3	1	3
1. Arthritis, . . . . .	Totals, . . . . .	5	—	—	—	—	—	—	—	—	—
	Males, . . . . .	1	—	—	1	—	—	—	—	—	—
	Females, . . . . .	4	—	—	—	—	1	—	2	—	—
2. Joint Diseases, etc.,—											
—Joint Disease, . . . . .	Totals, . . . . .	4	—	—	—	—	—	—	—	—	—
	Males, . . . . .	3	—	—	1	—	2	—	—	—	—
	Females, . . . . .	1	—	—	—	—	—	—	—	—	1
—Hip Disease, . . . . .	Totals, . . . . .	14	—	—	—	—	—	—	—	—	—
	Males, . . . . .	3	—	—	3	—	1	1	1	1	—
	Females, . . . . .	6	2	—	1	—	1	1	—	—	—
—Necrosis, . . . . .	Totals, . . . . .	27	—	—	—	—	—	—	—	—	—
	Males, . . . . .	16	1	—	1	1	1	4	—	4	2
	Females, . . . . .	11	—	1	1	—	2	—	2	—	1

### Nosological Arrangement.

[illegible]

			January.						July.	August.	September.
III. 1. <i>Integument System.</i>	Totals, .	51	-	-	-	-	-	-	-	-	-
	Males, .	24	2	3	1	2	3	2	1	3	1
	Females, .	27	6	3	3	1	1	1	4	1	1
2. Phlegmon (Abscess),	Totals, .	71	-	-	-	-	-	-	-	-	-
	Males, .	31	3	3	2	-	5	1	2	3	2
	Females, .	40	4	4	4	3	4	3	6	2	4
3. Ulcer, . . . .	Totals, .	6	-	-	-	-	-	-	-	-	-
	Males, .	1	-	-	-	-	-	-	-	-	-
	Females, .	5	-	1	-	1	-	1	-	1	-
4. Skin Disease, . .	Totals, .	29	-	-	-	-	-	-	-	-	-
	Males, .	19	2	1	-	3	4	1	1	-	1
	Females, .	9	-	-	-	-	2	-	1	1	2
DEVELOPMENTAL DISEASES,	Totals, .	4,732	-	-	-	-	-	-	-	-	-
	Males, .	2,239	184	150	207	202	175	175	195	208	189
	Females, .	2,494	228	214	233	188	197	162	190	233	194
IV. 1. <i>Developmental Diseases of Children,</i> . . .	Totals, .	1,396	-	-	-	-	-	-	-	-	-
	Males, .	304	57	57	69	71	63	64	79	71	61
	Females, .	592	53	54	53	38	44	43	44	63	44
2. Infantile, etc.,—	Totals, .	129	-	-	-	-	-	-	-	-	-
	Males, .	75	6	3	6	3	1	5	9	8	9
	Females, .	54	4	7	7	5	6	2	5	6	2
—Premature, . . . .	Totals, .	997	-	-	-	-	-	-	-	-	-
	Males, .	580	54	43	46	49	50	47	67	57	54
	Females, .	417	38	35	30	27	26	32	32	49	31
3. Cyanosis, . . . .	Totals, .	81	-	-	-	-	-	-	-	-	-
	Males, .	43	1	4	4	11	4	5	2	2	-
	Females, .	38	3	2	6	2	3	4	2	3	4
4. Spina Bifida, . . .	Totals, .	58	-	-	-	-	-	-	-	-	-
	Males, .	26	3	-	1	2	2	2	3	-	1
	Females, .	32	1	4	6	1	7	2	1	2	2
5. Other Malformations,	Totals, .	51	-	-	-	-	-	-	-	-	-
	Males, .	31	3	6	6	3	4	6	4	4	1
	Females, .	20	6	6	-	2	2	2	1	2	2
6. Teething, . . . .	Totals, .	50	-	-	-	-	-	-	-	-	-
	Males, .	29	-	2	4	3	2	4	4	2	4
	Females, .	21	-	1	1	1	1	-	3	1	3
IV. 2. <i>Dev. Diseases of Adults,</i> .	Females, .	243	19	22	22	25	22	19	20	21	12
	1. Paramenia, . . . .	Females, .	8	-	1	-	3	-	-	-	1
	2. Childbirth, etc.,—	Females, .	14	3	2	3	1	-	2	1	-
—Childbirth, . . . .	Females, .	173	14	15	16	19	20	18	17	11	8
—Miscarriage, . . . .	Females, .	12	2	-	2	-	-	-	4	2	1
—Puerp. Convulsions, .	Females, .	36	1	4	1	4	2	4	6	5	2
IV. 3. <i>Developmental Diseases of Old People,—</i>	Totals, .	1,361	-	-	-	-	-	-	-	-	-
	Males, .	802	76	43	79	80	68	55	60	67	71
	Females, .	1,009	110	89	109	70	81	65	85	83	82

Nosological Arrangement.

October.	November.	December.	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	Over 80	Unknown.
-	2	3	1	-	4	3	-	3	1	1	1	4	-	-	3	3	-	-
1	3	2	1	-	4	-	-	5	-	1	1	1	4	4	2	4	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	7	3	18	2	1	1	1	3	1	3	-	-	3	4	4	7	3	-
1	4	6	13	3	1	-	-	-	2	4	7	3	5	4	5	6	1	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	3	2	6	-	1	-	1	3	1	3	-	-	3	4	2	5	-	-
-	3	4	6	3	1	-	-	-	2	4	7	2	5	3	4	3	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
-	1	-	-	-	-	-	-	-	-	-	-	1	-	1	1	1	1	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	4	1	12	2	-	1	-	-	-	-	-	-	-	-	1	2	1	-
1	-	2	7	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
179	162	207	1,353	27	5	2	1	1	2	2	3	3	8	14	67	261	484	5
206	187	256	1,083	27	5	1	1	4	3	21	119	90	26	35	106	293	672	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
67	58	73	793	10	1	-	-	-	-	-	-	-	-	-	-	-	-	-
50	48	60	580	11	-	-	-	-	1	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9	13	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	3	5	53	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	40	44	580	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	35	44	417	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	3	3	42	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	2	4	37	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	3	7	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	3	3	31	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	3	4	50	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	3	2	29	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	2	20	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-
2	2	2	13	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	11	21	-	-	-	-	-	-	1	20	117	86	14	1	-	-	-	4
1	2	-	-	-	-	-	-	-	1	2	1	-	3	1	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	5	8	1	-	-	-	-	-	-
13	6	18	-	-	-	-	-	-	-	11	79	70	9	-	-	-	-	4
1	-	-	-	-	-	-	-	-	-	1	6	4	1	-	-	-	-	-
3	3	3	-	-	-	-	-	-	-	1	23	11	1	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
65	59	78	-	-	-	-	-	-	-	-	-	-	-	-	55	261	484	2
76	77	132	-	-	-	-	-	-	-	-	-	-	-	-	92	293	672	2

TABLE IX.—Continued.

CAUSES OF DEATH.		DEATHS.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		Sex.	Totals.												
IV. 4. Developmental Diseases of Nutrition,—															
1. Atrophy and Debility,		Totals, . . .	1,232	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	632	41	50	56	57	48	51	55	70	57			
		Females, . . .	600	47	49	49	55	50	36	30	68	59			
VIOLENT DEATHS, . . . . .		Totals, . . .	2,214	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	1,099	121	108	128	101	148	144	224	195	140			
		Females, . . .	564	30	32	48	45	52	50	45	52	37			
V. 1. Accident or Negligence,		Totals, . . .	1,943	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	1,447	104	87	103	89	130	125	199	177	120			
		Females, . . .	496	36	28	40	41	48	45	40	49	33			
1. Fractures, etc.,—		Totals, . . .	166	—	—	—	—	—	—	—	—	—	—	—	—
—Fractures, . . . . .		Males, . . .	95	4	4	7	4	8	9	20	12	8			
		Females, . . .	71	7	5	6	3	7	7	6	4	4			
— R. R. Accidents, . . . . .		Totals, . . .	362	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	326	23	29	37	22	33	24	41	30	27			
		Females, . . .	26	1	2	—	3	—	3	2	7	5			
2. Casualty, . . . . .		Totals, . . .	479	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	381	31	21	21	20	34	38	51	53	39			
		Females, . . .	98	9	6	6	5	9	11	9	11	6			
3. Burns and Scalds, . . . . .		Totals, . . .	180	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	81	11	5	11	6	6	5	6	6	8			
		Females, . . .	99	7	4	16	16	12	4	9	6	2			
4. Poison, . . . . .		Totals, . . .	90	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	60	3	—	3	4	3	4	5	3	6			
		Females, . . .	40	1	2	3	6	3	4	4	2	6			
5. Drowning, etc.,—		Totals, . . .	299	—	—	—	—	—	—	—	—	—	—	—	—
—Drowning, . . . . .		Males, . . .	261	10	9	12	10	36	29	60	46	22			
		Females, . . .	38	1	—	1	6	6	6	4	5	2			
— Lost at Sea, . . . . .		Males, . . .	161	2	7	5	10	7	3	—	17	5			
6. Suffocation, etc.,—		Totals, . . .	12	—	—	—	—	—	—	—	—	—	—	—	—
—Strangulation, . . . . .		Males, . . .	7	1	—	1	1	—	1	3	—	—			
		Females, . . .	5	—	—	1	—	—	1	1	—	—			
— Suffocation, . . . . .		Totals, . . .	160	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	94	11	9	9	9	3	7	6	7	10			
		Females, . . .	66	6	7	7	2	8	3	2	3	7			
7. Otherwise,—		Totals, . . .	6	—	—	—	—	—	—	—	—	—	—	—	—
—Amputation, . . . . .		Males, . . .	4	1	—	1	—	—	—	2	—	—			
		Females, . . .	2	1	—	—	—	—	—	—	—	—			
—Cold Water, . . . . .		—	—	—	—	—	—	—	—	—	—	—			
—Exposure, . . . . .		Totals, . . .	14	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	11	1	—	3	1	1	—	—	—	—			
		Females, . . .	3	—	1	1	—	—	—	—	—	—			
—Freezing, . . . . .		Males, . . .	1	1	—	—	—	—	—	—	—	—			
—Hent, . . . . .		Totals, . . .	13	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	10	—	—	—	—	—	3	4	1	—			
		Females, . . .	3	—	—	—	—	—	—	2	1	—			
—Lightning, . . . . .		Totals, . . .	6	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	1	—	—	—	—	—	—	—	—	—	1	—	—
		Females, . . .	5	—	—	—	—	—	—	—	—	5	—	—	—
—Starvation, . . . . .		Males, . . .	1	—	—	—	—	—	—	—	—	—	—	—	—
—Surgical Operation, . . . . .		Totals, . . .	53	—	—	—	—	—	—	—	—	—	—	—	—
		Males, . . .	13	—	3	3	2	—	—	1	1	1			
		Females, . . .	40	3	1	1	—	1	6	1	5	1			

Nosological Arrangement.

October.	November.	December.	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	Over 80	Unknown.
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	45	56	560	17	4	2	1	1	2	2	3	3	8	14	12	-	-	-
59	51	43	503	16	6	1	1	4	1	1	2	4	12	34	14	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
126	99	136	83	18	25	22	19	67	52	78	309	297	215	160	104	61	34	56
57	42	55	74	19	15	15	7	40	11	12	49	65	40	55	39	60	50	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
105	83	125	83	18	24	22	19	66	52	76	329	256	175	117	74	54	26	56
48	39	49	72	19	15	15	7	40	11	10	42	43	32	45	37	55	50	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	6	6	1	-	1	-	1	6	3	3	23	13	13	11	2	9	8	1
9	5	8	4	-	1	1	-	1	-	1	4	3	-	4	8	19	25	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	21	25	-	-	1	3	1	9	11	16	126	60	49	28	14	10	-	8
1	1	1	-	1	-	1	-	2	2	1	4	2	4	4	3	2	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	26	20	2	5	3	7	5	15	16	16	69	74	56	47	37	18	10	1
6	14	7	4	3	4	3	2	2	1	1	12	5	4	10	11	15	21	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	5	6	6	9	12	8	6	7	-	3	6	5	6	2	4	5	1	1
7	5	11	2	7	6	7	4	17	1	2	5	14	4	11	8	8	3	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	2	9	2	1	2	1	-	2	-	1	12	17	4	2	4	1	1	-
3	3	4	2	3	1	-	-	2	2	2	7	6	6	6	1	1	1	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	6	9	3	2	4	3	6	22	20	30	52	51	31	17	9	4	4	3
4	1	-	1	4	3	2	-	7	4	2	5	1	3	2	1	3	-	-
-	5	40	-	-	-	-	-	-	-	6	34	18	6	2	1	-	-	34
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	1	-	-	-	-	-	-	-	-	3	1	-	2	-	-	-
1	1	-	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	7	8	64	1	-	-	-	3	-	-	5	6	2	4	1	2	-	6
11	1	9	55	-	-	1	1	-	1	1	1	-	1	2	1	1	-	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	-	1	-	-
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	2	2	2	-	-	-	-	-	-	-	1	2	3	-	-	-	1	2
1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	1	-	-	1	3	-	2	-	2	1	-
-	-	-	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-
-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
-	1	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
1	2	-	2	-	1	-	-	1	1	1	-	3	2	1	-	1	-	-
4	8	9	1	-	-	-	-	2	-	-	4	12	10	3	3	4	-	1



TABLE IX. — Concluded.

CAUSES OF DEATH.	DEATHS.		January.	February.	March.	April.	May.	June.	July.	August.	September.
	Sex.	Totals.									
V. 2. <i>Battle</i> , . . . . .	- -	-	-	-	-	-	-	-	-	-	-
<i>Infanticide</i> , . . . .	Females,	2	-	-	1	-	-	-	-	-	-
V. 3. <i>Homicide</i> , . . . . .	Totals, .	18	-	-	-	-	-	-	-	-	-
	Males, .	12	1	1	-	1	1	-	1	1	1
	Females,	6	1	-	1	1	-	-	-	1	-
V. 4. <i>Suicide</i> , . . . . .	Totals, .	249	-	-	-	-	-	-	-	-	-
	Males, .	199	16	14	19	11	17	19	24	17	19
	Females,	50	2	4	6	3	4	5	5	2	4
V. 5. <i>Execution</i> , . . . . .	Males, .	2	-	1	1	-	-	-	-	-	-
SUDDEN, CAUSE UNKNOWN, .	Totals, .	2	-	-	-	-	-	-	-	-	-
	Males, .	1	-	-	1	-	-	-	-	-	-
	Females,	1	1	-	-	-	-	-	-	-	-
CAUSE NOT SPECIFIED, . . .	Totals, .	542	-	-	-	-	-	-	-	-	-
	Males, .	271	25	23	31	26	26	17	15	22	20
	Females,	271	29	17	25	23	25	19	23	27	18
Hemorrhage, . . . . .	Totals, .	109	-	-	-	-	-	-	-	-	-
	Males, .	61	7	6	5	2	4	5	4	9	3
	Females,	48	6	8	9	2	3	3	1	7	2
Inflammation, . . . . .	Totals, .	17	-	-	-	-	-	-	-	-	-
	Males, .	10	-	2	1	1	2	2	-	2	-
	Females,	7	1	2	-	-	-	-	1	1	-
Tumor, . . . . .	Totals, .	105	-	-	-	-	-	-	-	-	-
	Males, .	32	1	4	4	3	3	1	1	4	3
	Females,	73	4	3	9	8	10	2	9	5	6
Unknown, . . . . .	Totals, .	311	-	-	-	-	-	-	-	-	-
	Males, .	168	17	11	21	20	17	9	10	7	14
	Females,	143	18	9	7	13	12	14	12	14	10

**Nosological Arrangement.**

[illegible]



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Table X.

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CAUSES OF DEATH,  
NOSOLOGICALLY ARRANGED  
(BY COUNTIES).

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TABLE X.—CAUSES OF  
*Exhibiting the Number of Deaths in Each County, from*  
[Still-births included.†]

CAUSES OF DEATH.	STATE.	Barnstable.	Berkshire.	Bristol.
All Causes, . . . . .	51,528	610	1,588	4,850
Specified Causes, . . . . .	50,984	602	1,570	4,818
(CLASSES.)				
I.—ZYMOTIC DISEASES, . . . . .	8,739	59	304	876
II.—CONSTITUTIONAL DISEASES, . . . . .	9,387	109	245	772
III.—LOCAL DISEASES, . . . . .	23,468	282	742	2,239
IV.—DEVELOPMENTAL DISEASES, . . . . .	7,176	91	204	758
V.—VIOLENT DEATHS, . . . . .	2,214	61	75	173
(ORDERS.)				
I.—1. Miasmatic Diseases, . . . . .	8,232	56	293	831
2. Enthetic Diseases, . . . . .	257	3	6	23
3. Dietic Diseases, . . . . .	247	—	5	22
4. Parasitic Diseases, . . . . .	3	—	—	—
II.—1. Diathetic Diseases, . . . . .	2,015	39	71	161
2. Tubercular Diseases, . . . . .	7,372	70	174	611
III.—1. Diseases of Nervous System, . . . . .	6,307	89	209	679
2. Diseases of Organs of Circulation, . . . . .	3,937	67	141	348
3. Diseases of Respiratory Organs, . . . . .	7,890	49	228	657
4. Diseases of Digestive Organs, . . . . .	2,993	34	99	341
5. Diseases of Urinary Organs, . . . . .	2,059	35	59	189
6. Diseases of Generative Organs, . . . . .	76	2	2	5
7. Diseases of Organs of Locomotion, . . . . .	101	3	2	7
8. Diseases of Integumentary System, . . . . .	105	3	2	13
IV.—1. Dev Diseases of Children, . . . . .	3,840	24	105	375
2. Dev. Diseases of Adults, . . . . .	243	1	8	24
3. Dev. Diseases of Old People, . . . . .	1,861	57	70	139
4. Diseases of Nutrition, . . . . .	1,232	9	21	220
V.—1. Accident or Negligence, . . . . .	1,943	57	65	165
2. Buttle, . . . . .	—	—	—	—
Infanticide, . . . . .	2	—	1	—
3. Homicide, . . . . .	18	—	—	—
4. Suicide, . . . . .	249	4	8	8
5. Execution, . . . . .	2	—	1	—
Sudden (cause unascertained), . . . . .	2	—	—	—
Causes unknown or ill-defined,* . . . . .	542	8	18	32

\* Including 109 deaths from "Hemorrhage," 105 from "Tumor," 17 from "Inflammation," and 311 deaths of which the cause was not stated in Returns.

DEATH. — *Nosological Arrangement.\***Specified Causes (statistically classified), during the Year 1893.*

[Still-births included.†]

Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
118	6,403	676	3,132	1,084	9,870	92	2,398	1,806	12,975	5,931
115	6,313	664	3,106	1,063	9,747	91	2,371	1,768	12,903	5,853
15	1,071	92	608	191	1,652	1	347	243	2,232	1,048
19	1,158	116	492	186	1,889	18	488	341	2,640	914
62	2,849	314	1,417	473	4,539	48	1,124	847	5,830	2,702
12	942	104	428	176	1,306	22	319	278	1,616	920
7.	293	38	161	37	361	2	93	59	585	269
14	1,002	86	575	185	1,578	1	322	222	2,070	997
1	36	5	17	3	53	—	15	15	58	22
—	32	1	16	3	20	—	10	6	103	29
—	1	—	—	—	1	—	—	—	1	—
7	300	37	109	54	371	13	124	83	403	243
12	858	79	383	132	1,518	5	364	258	2,237	671
24	799	69	369	134	1,239	17	325	232	1,241	881
11	475	85	191	97	793	7	214	177	890	441
16	961	92	498	152	1,499	4	354	261	2,313	806
3	343	37	220	56	572	10	110	95	769	304
8	240	26	123	31	377	9	106	76	543	237
—	9	1	1	2	19	1	5	—	20	9
—	10	—	9	1	22	—	6	3	25	13
—	12	4	6	—	18	—	4	3	29	11
3	526	36	232	77	740	7	150	116	1,029	420
—	27	7	17	5	29	—	8	12	71	34
9	222	54	87	75	337	14	129	125	272	271
—	167	7	92	19	200	1	32	25	244	195
7	265	32	143	28	316	2	81	48	491	243
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	1	—
—	—	—	1	—	—	—	—	—	14	3
—	28	6	16	9	45	—	12	11	79	23
—	—	—	1	—	—	—	—	—	—	—
—	—	—	—	—	1	—	—	—	—	1
3	90	12	26	21	122	1	22	38	72	77

\* See "Statistical Nosology."

† Still-births are included in no Tables of Deaths except Table X.

TABLE X. — Continued.

CAUSES OF DEATH.	STATE.	Barnstable.	Berkshire.	Bristol.
<b>I. — 1. <i>Miasmatic.</i></b>				
Totals, . . . . .	8,232	56	293	831
Chicken-pox, . . . . .	5	—	—	—
1. Small-pox, . . . . .	9	—	—	—
2. Measles, . . . . .	276	—	9	18
3. Scarlatina, . . . . .	810	3	33	70
4. Diphtheria, . . . . .	1,072	7	27	47
5. Cerebro-spinal Meningitis, . . . . .	121	—	1	9
6. Quinsy, . . . . .	34	—	—	6
7. Croup, . . . . .	322	2	19	26
8. Whooping-cough, . . . . .	274	1	4	23
9. Typhoid Fever,* . . . . .	750	9	30	64
10. Erysipelas, . . . . .	251	1	7	20
11. Metria (Puerperal Fever), . . . . .	46	—	1	5
12. Carbuncle, . . . . .	6	—	—	1
13. Influenza, . . . . .	296	7	14	17
14. Dysentery, . . . . .	231	2	10	25
15. Diarrhœa, . . . . .	543	2	13	38
16. Cholera Infantum, . . . . .	2,704	11	111	417
17. Cholera, . . . . .	93	2	5	9
18. Ague, . . . . .	46	3	1	4
19. Remittent Fever, . . . . .	40	2	2	5
20. Rheumatism, . . . . .	303	4	6	27
<b>I. — 2. <i>Enthetic.</i></b>				
Totals, . . . . .	257	3	6	23
1. Syphilis, . . . . .	48	—	1	3
2. Stricture of Urethra, . . . . .	5	—	—	—
3. Hydrophobia, . . . . .	2	—	—	—
4. Glanders, . . . . .	1	—	—	—
5. Malignant Pustule, . . . . .	1	—	—	—
6. Septicæmia, . . . . .	200	3	5	20
<b>I. — 3. <i>Dietic.</i></b>				
Totals, . . . . .	247	—	5	22
1. Privation, . . . . .	2	—	—	1
2. Purpura and Scurvy, . . . . .	40	—	1	4
3. Delirium Tremens, } Intemperance, . . . . .	205	—	4	17
4. Intemperance, }				
<b>I. — 4. <i>Parasitic.</i></b>				
Totals, . . . . .	3	—	—	—
1. Thrush, . . . . .	1	—	—	—
2. Worms, . . . . .	2	—	—	—

\* Including "Fever," Typhus Fever, Continued Fever and "Billous" Fever.

### ***Nosological Arrangement.***

[illegible]



TABLE X. — Continued.

CAUSES OF DEATH.	STATE.	Barnstable.	Berkshire.	Bristol.
<b>II. — 1. <i>Diathetic.</i></b>				
Totals, . . . . .	2,015	39	71	161
1. Gout, . . . . .	—	—	—	—
2. Dropsy, . . . . .	161	6	10	17
3. Anæmia, . . . . .	199	6	4	10
4. Cancer,* . . . . .	1,533	23	51	123
5. Canker (Noma), . . . . .	7	—	—	—
6. Mortification, . . . . .	115	4	6	11
<b>II. — 2. <i>Tubercular.</i></b>				
Totals, . . . . .	7,372	70	174	611
1. Scrofula, . . . . .	112	1	4	3
2. Tabes Mesenterica, . . . . .	1,192	3	26	159
3. Phthisis (Consumption of Lungs), . . . . .	5,527	64	137	417
4. Hydrocephalus (Tubercular Meningitis), . . . . .	541	2	7	32
<b>III. — 1. <i>Nervous System.</i></b>				
Totals, . . . . .	6,307	89	209	679
1. Cephalitis, . . . . .	1,571	13	59	172
2. Apoplexy, . . . . .	1,655	20	54	151
3. Paralysis, . . . . .	1,210	33	41	117
4. Insanity, . . . . .	272	3	6	19
5. Chorea, . . . . .	—	—	—	—
6. Epilepsy, . . . . .	135	2	3	16
7. Tetanus, . . . . .	36	—	1	2
8. Convulsions, . . . . .	883	9	23	164
9. <i>Brain Diseases, etc.,</i> . . . . .	545	9	22	38
<b>III. — 2. <i>Organs of Circulation.</i></b>				
Totals, . . . . .	3,937	67	141	348
1. Pericarditis, . . . . .	194	2	4	11
2. Aneurism, . . . . .	47	—	—	4
3. <i>Heart Diseases, etc.,</i> . . . . .	3,696	65	137	333
<b>III. — 3. <i>Respiratory Organs.</i></b>				
Totals, . . . . .	7,890	49	228	657
1. Epistaxis, . . . . .	2	—	—	—
2. Laryngitis, . . . . .	120	1	4	22
3. Bronchitis, . . . . .	1,738	10	43	168
4. Pleurisy, . . . . .	200	—	3	23
5. Pneumonia, . . . . .	5,499	38	165	422
6. Asthma, . . . . .	112	—	2	10
7. <i>Lung Diseases, etc.,</i> . . . . .	219	—	11	12

\* Including 791 cases of Cancer part not stated, 288 Cancer of Stomach, 23 Cancer of Bowels, 163 Cancer of Liver, 154 Cancer of Uterus, 83 Cancer of Breast, 4 Cancer of Kidney, 24 of Epithelioma, 1 Cancer of Pancreas, and 2 Cancer of Spleen.

*Nosological Arrangement.*

Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
7	300	87	109	54	371	13	124	83	403	243
-	-	-	-	-	-	-	-	-	-	-
1	15	4	7	4	15	1	14	16	20	81
-	32	3	11	1	53	2	13	9	27	28
6	234	26	84	45	287	10	85	53	382	174
-	1	-	1	1	-	-	2	-	1	1
-	18	4	6	3	16	-	10	5	23	9
12	858	79	383	132	1,518	5	364	258	2,237	671
-	14	5	7	1	16	-	3	4	43	11
3	128	4	52	11	246	-	61	36	419	44
9	654	65	299	111	1,164	5	281	209	1,561	551
-	62	5	25	9	92	-	19	9	214	65
24	799	69	369	134	1,239	17	325	232	1,241	881
-	157	9	127	22	320	5	88	43	358	198
8	203	21	93	42	305	3	70	64	403	218
7	199	20	39	26	253	5	75	52	171	172
2	23	4	6	11	41	1	13	13	32	98
-	-	-	-	-	-	-	-	-	-	-
1	14	3	11	3	17	1	8	5	29	22
-	8	2	8	1	6	-	3	-	1	4
-	126	3	50	18	179	-	34	24	152	101
6	69	7	35	11	118	2	34	31	95	68
11	475	85	191	97	793	7	214	177	890	441
-	25	-	14	3	40	2	13	2	61	17
-	8	2	3	-	8	-	1	3	17	1
11	442	83	174	94	745	5	200	172	812	423
16	961	92	498	152	1,499	4	354	261	2,313	806
-	-	-	-	-	1	-	-	-	-	1
1	12	1	13	-	30	2	2	10	18	4
3	207	21	98	29	340	-	76	35	534	174
-	25	-	11	3	38	1	7	8	64	17
12	662	66	351	115	1,029	1	248	195	1,624	571
-	19	1	7	2	18	-	7	2	29	15
-	36	3	18	3	43	-	14	11	44	24

TABLE X. — Continued.

CAUSES OF DEATH.	STATE.	Barnstable.	Berkshire.	Bristol.
<b>III. — 4. Digestive Organs.</b>				
Totals, . . . . .	2,993	34	99	341
1. Gastritis, . . . . .	300	8	15	29
2. Enteritis, . . . . .	1,096	7	31	169
3. Peritonitis, . . . . .	591	1	26	63
4. Ascites, . . . . .	25	—	—	2
5. Ulceration of Intestines, . . . . .	17	—	—	2
6. Hernia, . . . . .	74	—	2	3
7. Ileus, . . . . .	143	3	5	8
8. Intussusception, . . . . .	28	—	1	2
9. Stricture of Intestines, . . . . .	17	—	—	1
10. Fistula, . . . . .	2	—	—	—
11. <i>Stomach Diseases, etc.</i> , . . . . .	182	3	4	16
12. <i>Pancreas Disease</i> , . . . . .	3	—	—	—
13. Hepatitis, . . . . .	87	—	2	13
14. Jaundice, . . . . .	91	1	3	12
15. <i>Liver Diseases, etc.</i> , . . . . .	337	11	10	21
16. Spleen Disease, . . . . .	—	—	—	—
<b>III. — 5. Urinary Organs.</b>				
Totals, . . . . .	2,059	85	59	189
1. Nephritis (Bright's Disease, etc.), . . . . .	1,348	19	29	127
2. Ischuria, . . . . .	3	1	—	—
3. Diabetes, . . . . .	214	3	15	18
4. Calculus (Gravel, etc.), . . . . .	11	—	—	—
5. Cystitis, . . . . .	146	2	5	7
6. <i>Kidney Diseases, etc.</i> , . . . . .	337	10	10	37
<b>III. — 6. Generative Organs.</b>				
Totals, . . . . .	76	2	2	5
1. Ovarian Dropsy, . . . . .	38	2	1	1
2. <i>Uterus Diseases, etc.</i> , . . . . .	38	—	1	4
<b>III. — 7. Organs of Locomotion.</b>				
Totals, . . . . .	101	3	2	7
1. Arthritis, . . . . .	5	—	—	—
2. <i>Joint Diseases, etc.</i> ,* . . . . .	96	3	2	7
<b>III. — 8. Integumentary System.</b>				
Totals, . . . . .	105	3	2	13
1. Phlegmon, . . . . .	71	2	2	7
2. Ulcer, . . . . .	6	1	—	1
3. <i>Skin Diseases, etc.</i> , . . . . .	28	—	—	5

\* Including 51 Disease of Spine, and 14 Hip Disease.

Nosological Arrangement.

Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
3	343	37	220	56	572	10	110	95	769	304
1	40	2	27	5	51	1	9	13	63	36
1	125	16	97	20	194	4	33	18	287	94
-	73	4	27	10	109	1	23	16	167	71
-	1	1	2	-	3	-	-	-	10	6
-	2	-	-	-	7	-	1	1	4	-
-	4	2	6	2	17	-	3	1	27	7
-	12	2	7	4	36	1	8	5	36	16
-	5	1	6	-	7	-	1	-	5	-
-	2	-	-	1	6	-	1	1	4	1
-	-	-	-	-	1	-	-	-	1	-
-	18	3	11	5	31	-	7	11	48	25
-	-	-	-	-	-	-	-	-	2	1
1	12	-	5	2	18	-	3	1	21	9
-	6	2	10	2	17	-	4	5	20	9
-	43	4	22	5	75	3	17	23	74	29
-	-	-	-	-	-	-	-	-	-	-
8	240	26	123	31	377	9	106	76	543	237
4	164	14	81	19	248	7	73	42	373	148
-	1	-	-	-	-	-	-	-	-	1
1	21	2	15	4	40	-	13	10	59	13
-	-	1	-	-	-	-	-	-	7	3
1	19	3	9	4	26	-	7	7	30	26
2	35	6	18	4	63	2	13	17	74	46
-	9	1	1	2	19	1	5	-	20	9
-	4	1	-	1	10	1	1	-	9	7
-	5	-	1	1	9	-	4	-	11	2
-	10	-	9	1	22	-	6	3	25	13
-	1	-	-	-	-	-	2	1	1	-
-	9	-	9	1	22	-	4	2	24	13
-	12	4	6	-	18	-	4	3	29	11
-	7	3	4	-	16	-	2	2	19	7
-	-	-	-	-	1	-	-	-	3	-
-	5	1	2	-	1	-	2	1	7	4

TABLE X. — Concluded.

CAUSES OF DEATH.	STATE.	Barnstable.	Berkshire.	Bristol.
<b>IV. — 1. Dev. Diseases of Children.</b>				
Totals, . . . . .	3,840	24	105	375
1. Stillborn, . . . . .	2,444	18	83	242
2. Infantile, Premature, etc.,* . . . .	1,226	3	14	112
3. Cyanosis, . . . . .	81	1	5	4
4. Spina Bifida, . . . . .	58	—	1	4
5. Other Malformations, . . . . .	81	—	2	2
6. Teething, . . . . .	50	2	—	11
<b>IV. — 2. Dev. Diseases of Adults.</b>				
Totals, . . . . .	243	1	8	24
1. Paramenia, . . . . .	8	—	—	1
2. Childbirth,† . . . . .	235	1	8	23
<b>IV. — 3. Dev. Diseases of Old People.</b>				
1. Old Age, . . . . .	1,861	57	70	139
<b>IV. — 4. Diseases of Nutrition.</b>				
1. Atrophy and Debility, . . . . .	1,232	9	21	220
<b>V. — 1. Accident or Negligence.</b>				
Totals, . . . . .	1,943	57	65	165
1. Fractures and Contusions, . . . . .	528	1	29	40
2. Wounds, . . . . .	—	—	—	—
3. Burns and Scalds, . . . . .	180	3	5	13
4. Poison, . . . . .	90	1	1	12
5. Drowning (and Lost at Sea), . . . .	400	46	8	34
6. Suffocation and Strangulation, . . .	172	2	5	31
7. Otherwise,‡ . . . . .	94	1	3	1
8. Casualty,§ . . . . .	479	3	14	34
<b>V. — 2. Battle.</b>				
Infanticide, . . . . .	2	—	1	—
<b>V. — 3. Homicide.</b>				
18	—	—	—	—
<b>V. — 4. Suicide.   </b>				
249	4	8	8	
<b>V. — 5. Execution.</b>				
2	—	1	—	
Sudden (cause unknown), . . . . .	2	—	—	—
Cause not stated or ill defined,¶ . . .	542	8	18	32

\* See note on page 64.

† Not including 46 cases of Metria (Puerperal Fever).

‡ Under "Otherwise" (V. — 1. 7) are included deaths from heat, cold, drinking cold water, lightning, surgical operation and exposure.

§ Manner not specified; returned as "Casualty."

|| Totals; manner not stated.

¶ Comprising 109 deaths from "Hemorrhage," 105 from "Tumor," 17 from "Inflammation," and 311 deaths either returned as "Unknown," or of which no cause was stated in the Returns.

*Nosological Arrangement.*

Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
3	526	36	232	77	740	7	150	116	1,029	420
3	339	22	133	47	450	4	99	55	695	254
-	150	11	82	27	243	-	44	49	256	135
-	10	1	6	-	8	3	1	2	29	11
-	7	-	3	1	12	-	4	-	15	11
-	14	2	5	2	17	-	1	5	26	5
-	6	-	3	-	10	-	1	5	8	4
-	27	7	17	5	29	-	8	12	71	34
-	2	-	-	-	-	-	-	-	4	1
-	25	7	17	5	29	-	8	12	67	33
9	222	54	87	75	337	14	129	125	272	271
-	167	7	92	19	200	1	32	25	244	195
7	265	32	143	28	316	2	81	48	491	243
-	40	12	59	6	105	-	20	13	127	76
-	-	-	-	-	-	-	-	-	-	-
-	20	2	12	1	30	-	11	5	59	19
-	10	1	4	2	11	-	2	2	33	11
6	122	2	16	6	54	1	13	8	42	42
-	12	1	24	-	24	-	2	5	39	27
1	9	4	4	5	13	-	7	1	30	15
-	52	10	24	8	79	1	26	14	161	53
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	1	-
-	-	-	1	-	-	-	-	-	14	3
-	28	6	16	9	45	-	12	11	79	23
-	-	-	1	-	-	-	-	-	-	-
-	-	-	-	-	1	-	-	-	-	1
3	90	12	26	21	122	1	22	38	72	77

NOTE.—As “stricture of the urethra” is almost invariably the result of gonorrhœa, it is classed as (I.—2. 2.)—[DR. FARR.]

## NOTE.

Previously to the adoption, in the Registration Report of 1855, of the present NOSOLOGICAL ARRANGEMENT of Tables IX. and X., the term "Infantile" in those tables included under a single designation not only all deaths returned under the several heads "Infantile," "Premature" or "Premature Births," but also all ascribed to "Debility" or "Unknown" causes, if under two years of age.

This plan was continued until the Registration Report of 1868, in which, to secure greater accuracy, the method now employed was adopted, by which deaths returned under the head of "Premature," "Premature Births" or "Infantile" are stated *separately* in Tables IX. and X. Deaths of children under two years, from "Debility" or "Unknown" causes, are no longer classed as "Infantile."

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**Table XI.**

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**DEATHS FROM SPECIAL CAUSES**

**IN 1893.**

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TABLE XI.—DEATHS IN EACH TOWN

THE STATE AND COUNTIES.	Population in 1890.	Small-pox.	Measles.	Scarlatina.	Diphtheria and Croup.	Cerebro-sp. Meningitis.	Whooping-cough.	Typhoid Fever.	Erysipelas.
MASSACHUSETTS,	2,238,943	9	276	810	1,394	121	274	760	251
BARNSTABLE, . . .	29,172	-	-	3	9	-	1	9	1
BERKSHIRE, . . .	81,108	-	9	33	46	1	4	30	7
BRISTOL, . . .	186,465	-	18	70	73	9	23	64	20
DUKES, . . .	4,369	-	1	-	1	-	-	4	-
ESSEX, . . .	299,995	-	23	129	131	15	50	117	38
FRANKLIN, . . .	38,610	-	2	1	10	1	1	10	-
HAMPDEN, . . .	135,713	4	22	47	81	7	17	54	12
HAMPSHIRE, . . .	51,859	-	17	10	28	4	2	17	4
MIDDLESEX, . . .	431,167	1	52	170	219	29	41	153	42
NANTUCKET, . . .	3,268	-	-	-	-	-	-	-	-
NORFOLK, . . .	118,950	-	13	46	47	4	12	36	14
PLYMOUTH, . . .	92,700	-	6	17	62	6	8	19	8
SUFFOLK, . . .	484,780	4	55	254	572	18	63	144	80
WORCESTER, . . .	280,787	-	58	30	115	27	52	93	25
BARNSTABLE Co., .	29,172	-	-	3	9	-	1	9	1
Barnstable, . . .	4,023	-	-	2	-	-	-	1	-
Bourne, . . .	1,442	-	-	-	-	-	-	-	-
Brewster, . . .	1,003	-	-	-	-	-	-	-	-
Chatham, . . .	1,954	-	-	-	-	-	-	-	-
Dennis, . . .	2,899	-	-	-	1	-	-	2	-
Eastham, . . .	602	-	-	-	-	-	-	-	-
Falmouth, . . .	2,567	-	-	-	1	-	-	1	-
Harwich, . . .	2,734	-	-	-	5	-	-	3	-
Mashpee, . . .	298	-	-	-	-	-	-	-	-
Orleans, . . .	1,219	-	-	-	-	-	-	-	-
Provincetown, . . .	4,642	-	-	1	-	-	-	2	1
Sandwich, . . .	1,819	-	-	-	-	-	-	-	-
Truro, . . .	919	-	-	-	-	-	-	-	-
Wellfleet, . . .	1,291	-	-	-	-	-	-	-	-
Yarmouth, . . .	1,760	-	-	-	2	-	1	-	-
BERKSHIRE Co., .	81,108	-	9	33	46	1	4	30	7
Adams, . . .	9,213	-	-	2	3	-	-	3	1
Alford, . . .	297	-	-	-	-	-	-	-	-
Becket, . . .	946	-	1	2	-	-	-	-	-
Cheshire, . . .	1,308	-	-	-	-	-	-	2	-
Clarksburg, . . .	884	-	-	2	-	-	-	-	-
Dalton, . . .	2,885	-	-	-	5	-	-	1	-
Egremont, . . .	845	-	-	1	-	-	-	-	-
Florida, . . .	436	-	-	1	-	-	-	-	-
Great Barrington, . . .	4,612	-	-	1	2	-	-	2	-
Hancock, . . .	506	-	-	1	-	-	-	-	-
Hinsdale, . . .	1,739	-	4	-	-	-	-	1	-
Lanesborough, . . .	1,018	-	-	1	-	-	-	-	-
Lee, . . .	3,785	-	-	-	-	-	2	1	2

FROM SPECIAL CAUSES IN 1893.

Metris (Puer- peral Fever).	Childbirth.	Dysentery.	Diarrhoea.	Cholera Morb.	Cholera Infantum.	Phthisis or Consumption.	Pneumonia.	Bronchitis.	Apoplexy.	Accident.	Homicide.	Execution.	Suicide.	Alcoholism.
46	243	231	543	93	2,704	5,527	5,499	1,738	1,655	1,943	20	2	249	205
-	1	2	2	2	11	64	38	10	20	57	-	-	4	-
1	8	10	13	6	111	137	165	43	54	65	1	1	8	4
5	24	25	38	9	417	417	422	168	151	165	-	-	8	17
-	-	3	2	-	1	9	12	3	8	7	-	-	-	-
5	27	26	56	20	305	654	662	207	203	265	-	-	28	32
-	7	10	4	1	34	65	66	21	21	32	-	-	6	1
3	17	11	38	8	195	299	352	97	93	143	1	1	16	10
1	5	10	16	-	53	111	115	29	42	28	-	-	9	2
9	29	40	136	17	644	1,164	1,029	340	305	316	-	-	45	15
-	-	-	-	-	-	5	1	-	3	2	-	-	-	-
-	8	9	17	1	89	281	248	76	70	81	-	-	12	8
2	12	4	7	3	47	209	195	35	64	48	-	-	11	5
11	71	40	148	17	531	1,561	1,623	535	403	491	15	-	79	90
9	34	41	66	10	366	551	571	174	218	243	3	-	23	21
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	1	2	2	2	11	64	38	10	20	57	-	-	4	-
-	1	-	-	-	2	5	6	1	11	2	-	-	2	-
-	-	-	-	-	-	1	1	-	-	3	-	-	-	-
-	-	-	-	-	-	1	2	2	-	-	-	-	-	-
-	-	-	-	-	1	4	2	-	-	-	-	-	1	-
-	-	-	-	-	-	9	1	1	1	4	-	-	-	-
-	-	-	-	-	-	1	1	-	3	-	-	-	-	-
-	-	-	-	-	-	5	5	1	1	2	-	-	-	-
-	-	-	-	-	1	8	4	-	1	1	-	-	1	-
-	-	-	-	-	1	1	-	1	-	-	-	-	-	-
-	-	-	-	-	-	5	1	-	-	-	-	-	-	-
-	-	1	2	-	5	11	12	3	3	17	-	-	-	-
-	-	-	-	1	-	2	1	1	-	-	-	-	-	-
-	-	-	-	-	1	3	-	-	-	27	-	-	-	-
-	-	-	-	-	-	3	1	-	-	-	-	-	-	-
-	-	1	-	1	-	5	1	-	-	1	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	8	10	13	5	111	137	165	43	54	65	1	1	8	4
-	1	1	3	-	14	20	21	2	2	6	-	-	-	1
-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	2	3	1	-	1	1	1	-	-	-
-	-	1	-	-	1	2	3	-	1	1	-	-	1	-
-	-	-	-	-	3	-	3	-	-	-	-	-	-	-
-	-	-	-	1	4	6	6	1	5	2	-	-	-	-
-	-	-	-	-	-	1	3	-	-	-	-	-	-	-
-	-	2	1	-	4	6	11	-	-	6	-	-	-	1
-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
-	-	-	-	-	-	4	3	3	1	3	-	-	-	-
-	-	-	-	-	1	4	2	-	2	-	-	-	-	-
-	-	-	-	-	-	1	6	1	1	-	-	-	-	-

TABLE XI. — Continued.

COUNTIES AND TOWNS.	Population in 1890.	Small-pox.	Measles.	Scarlatina.	Diphtheria and Croup.	Cerebro-sp. Meningitis.	Whooping- cough.	Typhoid Fever.	Erysipelas.
<i>Berkshire — Con.</i>									
Lenox, . . . . .	2,889	-	-	-	-	-	1	-	-
Monterey, . . . . .	495	-	-	-	-	-	-	-	-
Mount Washington, . . . . .	148	-	-	-	-	-	-	1	-
New Ashford, . . . . .	125	-	-	-	-	-	-	-	-
New Marlborough, . . . . .	1,305	-	-	-	-	-	-	-	-
North Adams, . . . . .	16,074	-	1	14	26	-	1	9	2
Otis, . . . . .	583	-	-	-	1	-	-	-	-
Peru, . . . . .	305	-	-	-	-	-	-	-	-
Pittsfield, . . . . .	17,281	-	2	4	3	-	-	5	2
Richmond, . . . . .	796	-	-	-	-	-	-	-	-
Sandisfield, . . . . .	807	-	-	-	-	1	-	1	-
Savoy, . . . . .	569	-	-	-	-	-	-	-	-
Sheffield, . . . . .	1,954	-	-	1	-	-	-	-	-
Stockbridge, . . . . .	2,132	-	-	-	-	-	-	2	-
Tyringham, . . . . .	412	-	-	-	1	-	-	-	-
Washington, . . . . .	434	-	-	-	2	-	-	-	-
West Stockbridge, . . . . .	1,492	-	-	-	-	-	-	-	-
Williamstown, . . . . .	4,221	-	-	3	3	-	-	2	-
Windsor, . . . . .	612	-	1	-	-	-	-	-	-
<b>BRISTOL Co., . . . . .</b>	<b>186,465</b>	<b>-</b>	<b>18</b>	<b>70</b>	<b>73</b>	<b>9</b>	<b>23</b>	<b>64</b>	<b>20</b>
Acushnet, . . . . .	1,027	-	-	-	-	-	-	1	-
Attleborough, . . . . .	7,577	-	-	1	5	-	1	-	-
Berkley, . . . . .	894	-	-	-	-	-	-	-	-
Dartmouth, . . . . .	3,122	-	-	-	3	-	-	-	-
Dighton, . . . . .	1,889	-	1	-	-	-	-	-	-
Easton, . . . . .	4,493	-	-	-	1	-	1	1	-
Fairhaven, . . . . .	2,919	-	-	1	3	-	-	2	2
Fall River, . . . . .	74,398	-	5	33	29	2	6	18	8
Freetown, . . . . .	1,417	-	-	-	-	-	-	-	-
Mansfield, . . . . .	3,432	-	1	-	3	-	-	1	1
New Bedford, . . . . .	40,733	-	8	8	13	5	8	29	5
North Attleborough, . . . . .	6,727	-	-	14	3	-	3	3	1
Norton, . . . . .	1,785	-	-	-	-	-	-	-	-
Raynham, . . . . .	1,340	-	1	1	-	-	-	1	1
Rehoboth, . . . . .	1,786	-	-	2	2	-	-	-	-
Seekonk, . . . . .	1,317	-	-	-	2	-	-	-	-
Somerset, . . . . .	2,106	-	-	-	-	-	1	-	-
Swanzey, . . . . .	1,456	-	-	-	-	-	-	-	-
Taunton, . . . . .	25,448	-	2	10	8	1	3	7	2
Westport, . . . . .	2,599	-	-	-	1	1	-	1	-
<b>DUKES Co., . . . . .</b>	<b>4,369</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>-</b>
Chilmark, . . . . .	353	-	-	-	-	-	-	-	-
Cottage City, . . . . .	1,080	-	-	-	1	-	-	2	-
Edgartown, . . . . .	1,156	-	1	-	-	-	-	1	-
Gay Head, . . . . .	139	-	-	-	-	-	-	-	-
Gosnold, . . . . .	135	-	-	-	-	-	-	-	-
Tisbury, . . . . .	1,506	-	-	-	-	-	-	1	-
West Tisbury, . . . . .	-	-	-	-	-	-	-	-	-
<b>ESSEX Co., . . . . .</b>	<b>299,995</b>	<b>-</b>	<b>23</b>	<b>129</b>	<b>131</b>	<b>15</b>	<b>50</b>	<b>117</b>	<b>38</b>
Amesbury, . . . . .	9,798	-	-	11	2	-	-	2	-
Andover, . . . . .	6,142	-	3	8	-	1	-	1	5
Beverly, . . . . .	10,821	-	-	-	-	1	1	1	2
Boxford, . . . . .	865	-	-	-	-	-	-	-	1

*Deaths in Each Town from Special Causes.*

Metria (Puer- peral Fever).	Childbirth.	Dysentery.	Diarrhoea.	Cholera Morbus.	Cholera Infantum.	Phthisis or Consumption.	Pneumonia.	Bronchitis.	Apoplexy.	Accident.	Homicide.	Execution.	Suicide.	Alcoholism.
1	1	2	3	2	47	27	40	6	12	7	-	-	3	2
1	1	1	3	2	20	29	26	20	10	10	-	1	3	-
1	1	1	-	-	-	2	2	-	1	6	-	-	-	-
1	1	1	-	-	1	6	6	-	3	9	-	-	-	-
1	-	-	-	-	-	2	6	1	1	4	-	-	-	-
1	-	-	1	-	-	1	-	-	-	-	-	-	-	-
1	-	-	1	-	1	2	7	3	-	3	-	-	-	-
1	-	-	-	-	11	10	8	2	3	4	-	-	1	-
1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
5	24	25	38	9	417	417	422	168	151	165	-	-	8	17
-	-	1	-	-	-	2	1	-	2	-	-	-	-	-
-	2	4	-	-	10	10	21	2	9	10	-	-	1	-
-	1	-	-	-	-	5	2	1	2	-	-	-	-	-
-	-	1	-	-	-	5	3	2	6	1	-	-	-	-
-	-	1	-	-	2	14	7	6	2	3	-	-	-	1
3	9	11	22	5	263	175	199	91	44	80	-	-	3	6
-	-	-	-	-	-	2	2	-	2	2	-	-	-	-
1	5	2	7	3	87	112	88	35	42	33	-	-	3	2
-	2	-	-	-	6	16	9	9	4	6	-	-	-	-
-	1	-	1	-	-	7	3	1	2	2	-	-	-	-
-	-	1	-	-	1	3	6	2	2	3	-	-	-	-
-	-	-	1	-	3	5	2	1	3	1	-	-	1	-
1	2	4	7	-	36	43	62	13	17	18	-	-	-	8
-	-	-	-	-	3	2	5	-	2	-	-	-	-	-
-	-	3	2	-	1	9	12	3	8	7	-	-	-	-
-	-	-	-	-	-	1	5	-	1	-	-	-	-	-
-	-	-	1	-	-	3	3	-	1	2	-	-	-	-
-	-	-	-	-	-	-	-	-	1	5	-	-	-	-
-	-	2	1	-	1	1	1	1	2	-	-	-	-	-
-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
5	27	26	56	20	305	654	662	207	203	265	-	-	28	32
1	-	1	-	1	9	26	20	8	6	2	-	-	-	1
-	-	2	-	-	-	10	13	11	1	6	-	-	2	-
-	1	1	1	-	9	22	13	7	8	4	-	-	1	-
-	-	-	-	-	-	2	1	-	-	1	-	-	-	-

TABLE XI. — Continued.

COUNTIES AND TOWNS.	Population in 1890.	Small-pox.	Measles.	Scarlatina.	Diphtheria and Croup.	Cerebro-sp. Meningitis.	Whooping- cough.	Typhoid Fever.	Erysipelas.
<i>Essex — Con.</i>									
Bradford, . . .	3,720	-	-	-	1	2	-	1	-
Danvers, . . .	7,454	-	-	1	-	-	1	1	-
Essex, . . .	1,713	-	-	1	-	-	-	-	-
Georgetown, . . .	2,117	-	-	-	-	-	-	-	1
Gloucester, . . .	24,651	-	1	5	11	-	-	5	2
Groveland, . . .	2,191	-	-	-	-	-	-	-	-
Hamilton, . . .	961	-	-	-	2	-	-	-	-
Haverhill, . . .	27,412	-	-	6	3	1	6	13	2
Ipswich, . . .	4,439	-	-	2	2	-	-	1	2
Lawrence, . . .	44,654	-	6	78	23	1	12	39	8
Lynn, . . .	55,727	-	6	11	41	3	15	13	7
Lynnfield, . . .	787	-	-	-	-	-	-	-	-
Manchester, . . .	1,789	-	-	-	-	-	-	1	-
Marblehead, . . .	8,202	-	-	3	1	2	-	4	-
Merrimac, . . .	2,633	-	-	-	-	-	-	2	-
Methuen, . . .	4,814	-	1	3	1	1	-	2	-
Middleton, . . .	924	-	-	-	-	-	-	-	-
Nahant, . . .	880	-	1	-	-	-	-	-	-
Newbury, . . .	1,427	-	-	-	-	-	-	1	1
Newburyport, . . .	13,947	-	-	1	8	1	-	7	2
North Andover, . . .	3,742	-	-	2	-	-	-	1	-
Peabody, . . .	10,158	-	2	-	1	1	3	2	2
Rockport, . . .	4,087	-	-	-	1	-	-	-	1
Rowley, . . .	1,248	-	-	-	-	-	-	-	-
Salem, . . .	30,801	-	2	1	26	1	12	17	2
Salisbury, . . .	1,316	-	-	-	-	-	-	-	-
Saugus, . . .	3,673	-	1	-	1	-	-	1	-
Swampscott, . . .	3,198	-	-	1	1	-	-	1	-
Topsfield, . . .	1,022	-	-	-	4	-	-	-	-
Wenham, . . .	886	-	-	-	-	-	-	1	-
West Newbury, . . .	1,796	-	-	-	2	-	-	-	-
<b>FRANKLIN Co., . . .</b>	<b>38,610</b>	-	<b>2</b>	<b>1</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>10</b>	-
Ashfield, . . .	1,025	-	-	-	-	-	-	-	-
Bernardston, . . .	770	-	-	-	-	-	-	-	-
Buckland, . . .	1,570	-	-	-	-	-	-	-	-
Charlemont, . . .	972	-	-	-	-	-	-	-	-
Colrain, . . .	1,671	-	-	-	-	-	-	1	-
Conway, . . .	1,451	-	-	-	-	-	-	-	-
Deerfield, . . .	2,910	-	1	-	-	-	-	-	-
Erving, . . .	972	-	-	1	-	-	-	1	-
Gill, . . .	960	-	-	-	-	-	-	-	-
Greenfield, . . .	5,252	-	-	-	6	-	1	5	-
Hawley, . . .	515	-	-	-	-	-	-	-	-
Heath, . . .	503	-	-	-	-	-	-	-	-
Leverett, . . .	702	-	-	-	-	-	-	-	-
Leyden, . . .	407	-	-	-	-	-	-	-	-
Monroe, . . .	282	-	-	-	-	-	-	-	-
Montague, . . .	6,296	-	1	-	3	-	-	-	-
New Salem, . . .	856	-	-	-	-	-	-	1	-
Northfield, . . .	1,869	-	-	-	-	-	-	-	-
Orange, . . .	4,568	-	-	-	1	-	-	2	-
Rowe, . . .	541	-	-	-	-	-	-	-	-
Shelburne, . . .	1,553	-	-	-	-	-	-	-	-
Shutesbury, . . .	453	-	-	-	-	1	-	-	-
Sunderland, . . .	663	-	-	-	-	-	-	-	-
Warwick, . . .	565	-	-	-	-	-	-	-	-
Wendell, . . .	505	-	-	-	-	-	-	-	-
Whately, . . .	779	-	-	-	-	-	-	-	-



TABLE XI. — Continued.

COUNTIES AND TOWNS.	Population in 1890.	Small-pox.	Measles.	Scarlatina.	Diphtheria and Croup.	Cerebro-sp. Meningitis.	Whooping- cough.	Typhoid Fever.	Erysipelas.
<b>HAMPDEN Co., . .</b>	<b>135,713</b>	<b>4</b>	<b>22</b>	<b>47</b>	<b>81</b>	<b>7</b>	<b>17</b>	<b>54</b>	<b>12</b>
Agawam, . . . .	2,352	-	-	2	1	-	-	1	1
Blandford, . . . .	871	-	-	-	-	-	-	-	-
Brimfield, . . . .	1,096	-	-	1	-	-	-	1	-
Chester, . . . .	1,295	-	-	-	-	-	-	-	-
Chicopee, . . . .	14,050	-	2	3	6	3	1	10	3
Granville, . . . .	1,061	-	-	-	1	-	-	1	-
Hampden, . . . .	831	-	-	-	5	-	-	-	-
Holland, . . . .	201	-	-	-	-	-	-	1	-
Holyoke, . . . .	35,637	-	1	7	34	-	11	10	3
Longmeadow, . . . .	2,183	-	-	2	-	-	-	-	-
Ludlow, . . . .	1,939	-	-	-	-	-	-	1	-
Monson, . . . .	3,650	-	-	1	-	-	-	-	-
Montgomery, . . . .	266	-	-	-	-	-	-	-	-
Palmer, . . . .	6,520	-	10	1	6	1	-	3	-
Russell, . . . .	879	1	-	1	-	-	-	-	-
Southwick, . . . .	914	-	-	-	-	-	-	-	-
Springfield, . . . .	44,179	1	9	23	20	3	4	17	3
Tolland, . . . .	393	-	-	-	-	-	-	-	-
Wales, . . . .	700	-	-	1	-	-	-	-	-
Westfield, . . . .	9,805	2	-	-	1	-	-	5	2
West Springfield, . . . .	5,077	-	-	5	5	-	1	3	-
Wilbraham, . . . .	1,814	-	-	-	2	-	-	1	-
<b>HAMPSHIRE Co., . .</b>	<b>51,859</b>	<b>-</b>	<b>17</b>	<b>10</b>	<b>28</b>	<b>4</b>	<b>2</b>	<b>17</b>	<b>4</b>
Amherst, . . . .	4,512	-	-	-	2	-	-	-	-
Belchertown, . . . .	2,120	-	4	-	-	1	-	-	1
Chesterfield, . . . .	608	-	1	5	-	-	-	-	-
Cummington, . . . .	787	-	-	-	-	-	-	-	-
Easthampton, . . . .	4,395	-	1	-	12	1	-	1	-
Enfield, . . . .	952	-	-	-	-	-	-	-	-
Goshen, . . . .	297	-	-	-	-	-	-	-	-
Granby, . . . .	765	-	-	1	-	-	1	-	-
Greenwich, . . . .	526	-	-	-	-	-	1	-	-
Hadley, . . . .	1,669	-	-	-	1	-	-	-	-
Hatfield, . . . .	1,246	-	-	-	-	1	-	-	-
Huntington, . . . .	1,385	-	-	-	1	-	-	2	-
Middlefield, . . . .	455	-	-	-	-	-	-	1	-
Northampton, . . . .	14,990	-	2	8	5	-	-	6	-
Pelham, . . . .	486	-	-	-	-	-	-	1	1
Plainfield, . . . .	435	-	-	-	-	-	-	-	1
Prescott, . . . .	376	-	-	-	-	-	-	-	-
Southampton, . . . .	1,017	-	-	-	-	-	-	-	1
South Hadley, . . . .	4,261	-	-	1	1	-	-	3	-
Ware, . . . .	7,329	-	8	-	5	-	-	1	-
Westhampton, . . . .	477	-	-	-	1	-	-	-	-
Williamsburg, . . . .	2,057	-	1	-	-	1	-	2	-
Worthington, . . . .	714	-	-	-	-	-	-	-	-
<b>MIDDLESEX Co., . .</b>	<b>431,167</b>	<b>1</b>	<b>52</b>	<b>170</b>	<b>219</b>	<b>29</b>	<b>41</b>	<b>153</b>	<b>42</b>
Acton, . . . .	1,897	-	-	1	-	-	-	1	-
Arlington, . . . .	5,629	-	-	-	9	-	-	2	-
Ashby, . . . .	825	-	-	-	-	-	-	-	-
Ashland, . . . .	2,532	-	-	-	2	1	-	-	-
Ayer, . . . .	2,148	-	-	-	-	1	-	-	-
Bedford, . . . .	1,092	-	-	-	-	-	-	-	-
Belmont, . . . .	2,098	-	-	1	-	-	-	-	-

Deaths in Each Town from Special Causes.

Metris (Puer- peral Fever).	Childbirth.	Dysentery.	Diarrhoea.	Cholera Morbus.	Cholera Infantum.	Phthisis or Consumption.	Pneumonia.	Bronchitis.	Apoplexy.	Accident.	Homicide.	Execution.	Suicide.	Alcoholism.
3	17	11	38	8	195	299	352	97	93	143	1	1	16	10
-	-	1	-	-	3	1	7	3	4	4	-	-	-	-
-	-	-	-	-	-	1	1	-	3	-	-	-	-	-
-	1	-	-	-	-	-	6	-	1	1	-	-	-	-
-	2	5	6	-	36	32	44	11	6	13	-	-	1	1
-	1	-	-	-	-	1	2	-	1	10	-	-	-	-
-	-	-	-	-	1	1	-	-	1	-	-	-	-	-
-	4	1	12	1	74	81	98	30	17	37	-	-	3	2
-	-	1	2	-	3	3	4	1	1	-	-	-	-	-
-	-	-	3	-	1	2	4	3	3	1	-	-	-	-
-	-	-	-	1	-	11	3	1	6	1	-	-	-	-
1	1	1	1	-	11	16	17	7	3	3	-	-	-	-
-	-	-	-	-	-	3	3	-	1	2	-	-	1	-
-	5	1	12	5	41	109	98	33	36	51	1	1	9	6
-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
-	-	1	2	1	14	21	43	3	1	1	-	-	1	1
-	2	-	-	-	6	12	13	4	1	7	-	-	1	-
-	1	-	-	-	2	4	1	1	3	-	-	-	-	-
1	5	10	16	-	53	111	115	29	42	28	-	-	9	2
-	-	-	-	-	2	6	2	1	2	2	-	-	1	-
-	-	-	-	-	1	3	5	-	4	2	-	-	-	-
-	-	-	-	-	1	1	2	-	1	-	-	-	-	-
-	-	-	2	-	5	9	6	5	5	4	-	-	-	-
-	-	1	-	-	3	3	5	-	-	2	-	-	-	-
-	1	-	-	-	-	-	2	1	2	1	-	-	-	-
-	-	1	-	-	-	2	3	-	-	1	-	-	1	-
-	-	1	-	-	2	2	6	2	1	1	-	-	1	-
-	-	-	1	-	-	6	2	3	1	-	-	-	-	-
-	-	4	2	-	17	44	35	7	10	6	-	-	3	2
-	-	-	-	-	-	2	1	-	-	-	-	-	-	-
-	-	-	-	-	-	1	2	-	2	1	-	-	-	-
-	-	1	1	-	3	1	6	-	2	2	-	-	-	-
-	-	-	10	-	4	6	10	3	3	1	-	-	1	-
-	2	-	-	-	10	13	16	5	1	1	-	-	1	-
-	1	-	-	-	3	6	5	1	5	-	-	-	1	-
-	-	-	-	-	-	3	1	-	-	-	-	-	-	-
9	29	40	136	17	544	1,164	1,029	340	305	316	-	-	45	15
-	-	1	-	-	-	2	1	-	1	1	-	-	-	-
-	-	-	2	-	1	10	18	1	5	6	-	-	1	-
-	-	-	-	-	-	-	3	-	1	-	-	-	-	-
-	-	-	-	-	3	9	7	-	2	4	-	-	-	-
-	-	-	-	-	1	6	6	2	-	4	-	-	-	-
-	-	-	1	-	-	2	7	-	-	2	-	-	-	1
-	-	-	1	-	-	3	2	1	-	4	-	-	-	-



TABLE XI. — Continued.

COUNTIES AND TOWNS.	Population in 1890.	Small-pox.	Measles.	Scarlatina.	Diphtheria and Croup.	Cerebro-sp. Meningitis.	Whooping- cough.	Typhoid Fever.	Erysipelas.
<i>Middlesex — Con.</i>									
Billerica, . . .	2,380	-	-	-	-	-	-	-	-
Boxborough, . . .	325	-	-	-	-	-	-	-	-
Burlington, . . .	617	-	-	-	-	1	-	-	-
Cambridge, . . .	70,028	-	3	64	50	7	13	18	5
Carlisle, . . .	481	-	5	-	-	-	-	-	1
Chelmsford, . . .	2,695	-	-	-	-	1	-	1	1
Concord, . . .	4,427	-	-	-	-	-	-	1	-
Dracut, . . .	1,996	-	-	-	-	-	-	-	-
Dunstable, . . .	416	-	-	-	-	-	-	-	-
Everett, . . .	11,068	-	4	11	3	2	1	4	2
Framingham, . . .	9,239	-	-	1	2	1	-	2	1
Groton, . . .	2,057	-	-	-	-	-	-	2	-
Holliston, . . .	2,619	-	-	-	-	2	-	-	-
Hopkinton, . . .	4,088	-	-	-	-	1	-	-	-
Hudson, . . .	4,670	-	-	1	2	-	-	4	-
Lexington, . . .	3,197	-	-	-	1	-	-	-	-
Lincoln, . . .	987	-	-	-	-	-	-	-	-
Littleton, . . .	1,025	-	-	-	-	-	-	-	-
Lowell, . . .	77,696	-	9	18	36	2	15	55	9
Malden, . . .	23,031	-	2	14	7	-	-	5	4
Marlborough, . . .	13,805	-	1	1	6	1	2	7	-
Maynard, . . .	2,700	-	-	2	-	-	-	3	-
Medford, . . .	11,079	-	1	5	7	-	-	6	1
Melrose, . . .	8,519	-	-	5	4	-	-	-	-
Natick, . . .	9,118	-	-	2	2	-	2	2	-
Newton, . . .	24,379	-	1	2	31	1	-	4	2
North Reading, . . .	874	-	-	-	-	-	-	-	-
Pepperell, . . .	3,127	1	1	-	1	-	-	-	-
Reading, . . .	4,088	-	-	-	-	2	-	1	-
Sherborn, . . .	1,381	-	-	1	-	-	1	-	-
Shirley, . . .	1,191	-	-	-	-	-	1	-	-
Somerville, . . .	40,152	-	11	20	15	2	3	13	4
Stoneham, . . .	6,155	-	-	-	1	1	-	2	1
Stow, . . .	903	-	-	-	-	-	-	-	-
Sudbury, . . .	1,197	-	-	-	-	1	-	-	-
Tewksbury, . . .	2,516	-	-	-	1	-	-	2	-
State Almshouse, . . .	-	-	5	1	-	-	-	3	2
Townsend, . . .	1,750	-	-	1	-	-	-	-	-
Tyngsborough, . . .	662	-	1	-	-	-	-	1	-
Wakefield, . . .	6,982	-	-	3	7	-	-	3	-
Waltham, . . .	18,707	-	1	4	11	1	2	2	4
Watertown, . . .	7,073	-	2	2	3	1	-	1	2
Wayland, . . .	2,060	-	-	-	2	-	-	1	-
Westford, . . .	2,250	-	1	-	1	-	-	1	1
Weston, . . .	1,664	-	-	-	-	-	-	-	-
Wilmington, . . .	1,213	-	3	-	-	-	-	-	-
Winchester, . . .	4,861	-	-	1	2	-	-	2	-
Woburn, . . .	13,499	-	1	9	13	-	1	4	2
NANTUCKET Co., . . .	3,268	-	-	-	-	-	-	-	-
NORFOLK Co., . . .	118,950	-	13	46	47	4	12	36	14
Avon, . . .	1,384	-	1	-	1	-	-	-	-
Bellingham, . . .	1,334	-	-	-	-	-	1	-	-
Braintree, . . .	4,848	-	1	1	6	-	-	-	1
Brookline, . . .	12,103	-	6	7	4	-	3	3	2
Canton, . . .	4,538	-	-	16	1	-	-	-	-
Cohasset, . . .	2,448	-	-	-	1	-	-	-	-

Deaths in Each Town from Special Causes.

Malaria (Puer-peral Fever).	Childbirth.	Dysentery.	Diarrhoea.	Cholera Morbus.	Cholera Infantum.	Phthisis or Consumption.	Pneumonia.	Bronchitis.	Apoplexy.	Accident.	Homicide.	Execution.	Suicide.	Alcoholism.
-	-	-	-	-	1	4	4	3	6	2	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	4	4	24	3	63	233	176	75	69	50	-	-	11	4
-	1	-	-	-	3	7	1	1	1	1	-	-	2	1
-	-	2	-	-	2	8	10	1	5	4	-	-	1	-
-	-	-	1	-	4	4	5	2	-	1	-	-	-	-
1	1	1	3	2	5	32	26	11	10	12	-	-	1	-
-	-	3	4	-	-	12	20	6	8	10	-	-	-	-
-	-	1	1	2	1	1	5	-	3	1	-	-	-	-
-	-	-	4	-	-	7	7	1	1	4	-	-	-	-
-	-	-	-	-	2	6	13	1	1	1	-	-	-	-
-	-	-	-	-	14	9	6	-	2	3	-	-	1	-
-	-	-	2	-	4	7	2	3	-	4	-	-	-	1
1	-	-	-	-	-	-	-	1	1	1	-	-	-	1
2	4	2	17	2	286	212	217	126	52	46	-	-	7	2
-	1	-	5	1	13	57	50	6	17	22	-	-	7	-
1	-	4	2	1	20	41	23	6	8	3	-	-	1	-
-	-	-	-	-	2	4	3	1	3	1	-	-	-	-
-	1	1	4	2	12	19	19	6	9	9	-	-	2	-
-	1	-	3	-	8	21	16	1	9	4	-	-	1	-
-	1	1	2	1	5	19	8	3	3	10	-	-	-	-
-	1	1	4	-	11	48	50	10	15	17	-	-	1	-
-	-	-	-	-	4	2	1	-	-	1	-	-	-	-
-	1	-	-	-	1	17	5	2	2	5	-	-	1	-
-	1	-	-	-	2	8	5	1	4	1	-	-	-	-
-	-	-	-	-	1	2	1	1	-	-	-	-	1	-
2	7	5	16	-	34	97	100	18	26	23	-	-	3	2
-	1	-	1	1	1	20	11	1	4	1	-	-	-	-
-	-	1	-	-	-	-	2	1	1	1	-	-	-	-
-	-	-	-	-	1	6	1	-	-	-	-	-	-	-
-	-	-	-	-	5	5	2	2	-	2	-	-	-	1
-	-	6	23	-	1	71	40	6	3	1	-	-	-	-
-	-	1	-	-	1	5	3	-	3	1	-	-	-	-
-	-	-	-	-	-	1	4	-	1	1	-	-	-	-
-	2	1	2	-	2	16	7	7	12	5	-	-	-	-
-	3	-	5	1	11	47	49	7	5	15	-	-	-	-
-	-	-	-	-	2	21	11	7	7	2	-	-	1	-
-	-	-	-	-	-	7	1	1	2	1	-	-	-	1
-	-	-	1	-	2	6	7	5	1	1	-	-	-	-
-	-	-	-	-	-	-	1	-	-	6	-	-	-	-
-	-	-	2	1	1	1	4	-	-	1	-	-	-	-
-	-	4	1	-	2	8	22	-	2	7	-	-	1	-
-	-	-	-	-	9	24	27	7	9	13	-	-	1	1
-	-	-	-	-	-	5	1	-	3	2	-	-	-	-
-	8	9	17	1	89	281	248	76	70	81	-	-	12	8
-	-	-	-	-	2	-	6	1	4	1	-	-	-	-
-	-	-	-	-	1	2	7	1	3	-	-	-	1	-
-	2	1	2	-	5	11	13	2	1	6	-	-	1	-
-	-	-	1	-	11	25	36	15	11	5	-	-	-	1
-	-	-	-	-	2	14	11	-	-	2	-	-	1	-
-	-	-	-	-	2	3	2	-	1	-	-	-	-	1

TABLE XI. — Continued.

COUNTIES AND TOWNS.	Population in 1890.	Small-pox.	Measles.	Scarlatina.	Diphtheria and Croup.	Cerebro-sp. Meningitis.	Whooping- cough.	Typhoid Fever.	Erysipelas.
<i>Norfolk — Con.</i>									
Dedham, . . . .	7,123	-	-	3	2	1	1	3	1
Dover, . . . .	727	-	-	1	-	1	-	-	-
Foxborough, . . . .	2,933	-	-	1	-	-	-	-	1
Franklin, . . . .	4,831	-	1	1	1	-	1	3	1
Holbrook, . . . .	2,474	-	-	-	1	-	-	-	1
Hyde Park, . . . .	10,193	-	-	-	7	-	-	5	1
Medfield, . . . .	1,493	-	-	-	-	-	-	-	-
Medway, . . . .	2,985	-	-	-	-	-	-	-	-
Mills, . . . .	786	-	-	-	1	-	-	-	-
Milton, . . . .	4,278	-	-	-	1	-	2	-	2
Needham, . . . .	3,035	-	-	-	1	-	-	3	-
Norfolk, . . . .	913	-	-	-	-	-	-	1	-
Norwood, . . . .	3,733	-	-	5	6	-	-	-	1
Quincy, . . . .	16,723	-	2	6	9	1	-	11	1
Randolph, . . . .	3,946	-	-	-	-	1	-	-	-
Sharon, . . . .	1,634	-	-	-	-	-	-	-	1
Stoughton, . . . .	4,852	-	1	2	3	-	2	1	-
Walpole, . . . .	2,604	-	-	1	-	-	-	-	-
Wellesley, . . . .	3,600	-	1	-	-	-	1	1	-
Weymouth, . . . .	10,866	-	-	2	2	-	1	5	1
Wrentham, . . . .	2,566	-	-	-	-	-	-	-	-
 PLYMOUTH Co., . .	 92,700	 -	 6	 17	 62	 6	 8	 19	 8
Abington, . . . .	4,260	-	1	-	1	-	-	1	-
Bridgewater, . . . .	4,249	-	-	-	-	-	-	-	-
Brockton, . . . .	27,294	-	-	5	21	4	7	3	1
Carver, . . . .	994	-	-	-	-	-	-	-	-
Duxbury, . . . .	1,908	-	-	-	-	-	-	2	-
East Bridgewater, . . . .	2,911	-	-	-	-	-	-	1	1
Halifax, . . . .	562	-	-	-	-	-	-	-	-
Hanover, . . . .	2,093	-	-	-	-	-	-	1	-
Hanson, . . . .	1,267	-	1	1	-	-	-	-	-
Hingham, . . . .	4,564	-	-	4	1	-	-	1	-
Hull, . . . .	989	-	-	1	-	-	-	-	-
Kingston, . . . .	1,659	-	2	-	-	-	-	1	-
Lakeville, . . . .	935	-	-	-	-	-	-	1	-
Marion, . . . .	871	-	-	1	-	-	-	-	-
Marshfield, . . . .	1,713	-	-	-	-	-	-	-	-
Mattapoisett, . . . .	1,148	-	-	-	-	-	-	-	-
Middleborough, . . . .	6,065	-	-	2	2	-	1	3	-
Norwell, . . . .	1,635	-	-	-	2	1	-	-	-
Pembroke, . . . .	1,320	-	-	-	-	-	-	-	-
Plymouth, . . . .	7,314	-	1	2	25	-	-	2	2
Plympton, . . . .	597	-	-	-	-	-	-	-	-
Rochester, . . . .	1,012	-	-	-	-	-	-	1	-
Rockland, . . . .	5,213	-	-	-	2	-	-	1	2
Scituate, . . . .	2,318	-	-	-	1	-	-	-	-
Wareham, . . . .	3,451	-	-	-	1	-	-	-	1
West Bridgewater, . . . .	1,917	-	-	1	1	1	-	-	-
Whitman, . . . .	4,441	-	1	-	5	-	-	1	1
 SUFFOLK Co., . . .	 484,780	 4	 55	 254	 572	 18	 63	 144	 80
Boston, . . . .	448,477	4	55	243	559	16	59	136	77
Chelsea, . . . .	27,909	-	-	8	11	2	3	6	2
Revere, . . . .	5,668	-	-	2	1	-	-	1	1
Winthrop, . . . .	2,726	-	-	1	1	-	1	1	-

*Deaths in Each Town from Special Causes.*

[illegible]

TABLE XI. — Concluded.

COUNTIES AND TOWNS.	Population in 1890.	Small-pox.	Measles.	Scarlatina.	Diphtheria and Croup.	Cerebro-sp. Meningitis.	Whooping- cough.	Typhoid Fever.	Erysipelas.
WORCESTER Co., .	280,787	-	58	30	115	27	52	93	25
Ashburnham, . . .	2,074	-	2	-	1	1	-	1	-
Athol, . . . . .	6,319	-	2	1	1	-	-	7	-
Auburn, . . . . .	1,532	-	-	-	-	-	-	-	-
Barre, . . . . .	2,239	-	-	-	-	-	-	-	-
Berlin, . . . . .	884	-	-	-	-	-	-	-	-
Blackstone, . . .	6,138	-	-	-	10	-	1	2	-
Bolton, . . . . .	827	-	-	-	-	-	-	-	-
Boylston, . . . .	770	-	-	-	-	-	1	3	-
Brookfield, . . .	3,352	-	-	-	1	-	1	-	1
Charlton, . . . .	1,847	-	-	-	-	-	2	-	-
Clinton, . . . . .	10,424	-	-	-	-	-	-	2	2
Dana, . . . . .	700	-	-	-	-	-	-	-	-
Douglas, . . . . .	1,908	-	1	6	1	-	-	1	-
Dudley, . . . . .	2,944	-	-	-	2	-	-	1	-
Fitchburg, . . . .	22,037	-	9	-	4	-	2	5	2
Gardner, . . . . .	8,424	-	2	1	-	2	3	-	-
Grafton, . . . . .	5,002	-	1	-	1	1	-	1	-
Hardwick, . . . .	2,922	-	1	3	5	-	-	1	1
Harvard, . . . . .	1,095	-	-	-	-	-	-	1	-
Holden, . . . . .	2,623	-	-	-	1	-	-	-	1
Hopedale, . . . .	1,176	-	-	-	-	-	-	-	-
Hubbardston, . . .	1,346	-	-	-	-	-	-	-	-
Lancaster, . . . .	2,201	-	-	-	-	-	-	-	-
Leicester, . . . .	3,120	-	1	1	1	-	-	3	-
Leominster, . . . .	7,269	-	-	1	2	-	1	2	-
Lunenburg, . . . .	1,146	-	-	-	-	-	-	-	-
Mendon, . . . . .	919	-	-	-	-	-	-	-	1
Milford, . . . . .	8,780	-	1	1	1	1	-	3	-
Millbury, . . . .	4,428	-	2	-	3	-	-	3	-
New Braintree, . .	573	-	1	-	-	-	-	-	-
Northborough, . .	1,952	-	-	-	1	2	-	-	-
Northbridge, . . .	4,603	-	-	-	6	1	-	2	-
North Brookfield, .	3,871	-	1	1	1	-	-	1	2
Oakham, . . . . .	738	-	-	-	-	-	-	-	-
Oxford, . . . . .	2,616	-	-	-	-	-	1	2	-
Paxton, . . . . .	445	-	-	-	-	-	-	-	-
Petersham, . . . .	1,050	-	-	-	-	-	-	-	-
Phillipston, . . . .	502	-	-	-	-	-	-	-	-
Princeton, . . . .	982	-	-	-	-	-	-	-	-
Royalston, . . . .	1,030	-	-	-	-	-	-	1	1
Rutland, . . . . .	980	-	-	-	-	-	1	-	-
Shrewsbury, . . . .	1,449	-	-	-	-	-	-	-	-
Southborough, . .	2,114	-	-	-	-	-	-	-	-
Southbridge, . . .	7,655	-	2	1	1	-	-	2	-
Spencer, . . . . .	8,747	-	-	1	1	6	4	-	2
Sterling, . . . . .	1,244	-	-	-	-	-	-	-	-
Sturbridge, . . . .	2,074	-	1	-	-	-	-	2	-
Sutton, . . . . .	3,180	-	-	1	2	2	-	6	1
Templeton, . . . .	2,999	-	1	-	-	-	-	1	-
Upton, . . . . .	1,878	-	-	-	1	-	-	-	-
Uxbridge, . . . . .	3,408	-	-	-	2	-	-	-	-
Warren, . . . . .	4,681	-	4	2	1	-	1	-	-
Webster, . . . . .	7,031	-	3	-	12	-	-	5	2
Westborough, . . .	5,195	-	-	-	1	-	-	3	1
West Boylston, . .	3,019	-	1	1	1	-	2	1	-
West Brookfield, .	1,592	-	-	-	-	-	-	-	-
Westminster, . . .	1,688	-	1	-	-	-	-	-	-
Winchendon, . . .	4,390	-	3	-	2	1	4	1	-
Worcester, . . . .	84,655	-	18	9	49	10	28	30	8

Deaths in Each Town from Special Causes.

Metria (Puer- peral Fever).	Childbirth.	Dysentery.	Diarrhoea.	Cholera Morbua.	Cholera Infantum.	Phthiaia or Consumption.	Pneumonia.	Bronchitis.	Apoplexy.	Accident.	Homicide.	Execution.	Suicide.	Alcoholism.
9	34	41	66	10	366	551	571	174	218	243	3	-	23	21
-	1	1	1	-	3	2	8	2	3	3	-	-	1	-
-	1	2	2	-	2	7	13	-	5	8	-	-	1	-
-	-	-	-	-	-	-	2	1	1	-	-	-	-	-
-	-	-	-	-	-	6	2	-	4	-	-	-	-	1
-	4	1	4	1	8	10	18	2	-	1	-	-	-	-
-	-	3	-	-	1	1	-	1	-	1	-	-	-	-
-	-	1	1	-	3	2	2	1	-	2	-	-	-	-
-	1	3	5	1	14	13	20	2	5	13	-	-	-	-
-	-	-	-	-	-	2	-	-	1	-	-	-	-	-
-	2	-	1	-	1	6	10	-	3	-	-	-	-	-
-	3	3	2	-	2	3	11	1	-	2	-	-	1	-
-	3	3	4	-	39	52	34	16	10	18	-	-	3	2
-	2	-	1	-	10	14	19	5	6	6	-	-	1	1
-	1	1	-	-	8	11	7	6	3	4	-	-	-	-
-	-	-	-	-	3	3	3	1	1	2	-	-	-	-
-	-	2	-	1	2	2	2	1	3	7	1	-	-	-
-	-	-	1	-	-	2	4	1	-	1	-	-	-	-
-	-	-	-	-	-	3	7	-	-	2	-	-	-	-
-	1	-	1	-	4	6	4	2	5	1	-	-	1	-
-	-	-	1	-	3	6	4	2	5	3	-	-	-	-
-	-	-	-	-	2	8	11	4	11	5	-	-	-	-
-	1	-	-	-	-	2	3	-	1	-	-	-	-	-
-	1	2	2	-	5	1	4	4	1	13	-	-	1	-
-	1	-	-	-	3	13	9	3	7	3	-	-	-	-
-	-	-	-	-	-	2	-	-	2	1	-	-	-	-
-	2	3	1	-	12	8	9	1	5	6	-	-	-	-
-	-	-	-	-	5	15	2	1	6	3	-	-	1	-
-	-	1	-	-	-	3	5	-	1	2	-	-	-	-
-	-	-	-	-	1	-	-	-	-	3	-	-	-	-
-	-	-	-	-	1	1	5	-	5	2	-	-	-	-
-	-	-	-	-	-	-	3	-	1	1	-	-	-	-
-	-	-	-	-	-	2	2	1	-	2	-	-	-	-
-	-	-	-	-	1	5	2	-	4	-	-	-	-	-
-	-	-	-	-	-	6	4	-	-	-	-	-	-	-
-	-	-	-	-	-	2	2	-	-	-	-	-	-	-
-	-	-	-	-	-	1	4	-	-	-	-	-	-	-
-	-	-	-	-	-	2	2	-	-	-	-	-	-	-
-	-	-	-	-	-	13	10	13	1	3	1	-	1	-
-	-	1	3	-	13	19	13	-	3	3	-	-	1	-
-	-	-	-	-	7	7	6	2	-	2	-	-	-	-
-	-	-	-	-	8	8	3	3	1	2	-	-	-	-
-	-	-	-	-	2	5	5	1	-	5	-	-	-	-
-	-	-	-	-	1	9	7	1	1	1	-	-	-	-
-	-	-	-	-	8	2	5	7	2	4	-	-	1	-
-	-	-	-	-	9	13	16	9	4	5	-	-	1	-
-	-	-	-	-	2	12	6	5	8	2	-	-	-	1
-	-	-	-	-	5	6	1	1	-	3	-	-	-	-
-	-	-	-	-	1	3	3	-	2	-	-	-	1	-
-	-	-	-	-	-	9	13	2	4	6	-	-	-	1
1	8	10	28	3	156	186	204	71	63	67	1	-	8	15

# **DIVORCES.—THE STATE AND COUNTIES—(By Statute Causes).—1893.**

*Distinguishing, by Sex, the Libellants; Libels Contested and Uncontested; Number of Years Married; and Divorces Granted and Refused.*

THE STATE,	Number of libels pending Jan. 1, 1893 (including all cases, whether decrees nisi had been entered or not),		Number of cases in which nisi decrees had been entered at that date,		Number of cases in which nisi decrees were entered during the year 1893,		Number of cases in which nisi decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893,		Number of cases finally determined in 1893,	
	Number of libels pending Jan. 1, 1893, in which decrees nisi had been entered at that date,	Number of cases in which nisi decrees were entered during the year 1893,	Number of cases in which nisi decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893,	Number of cases finally determined in 1893,	Number of libels pending Jan. 1, 1893 (including all cases, whether decrees nisi had been entered or not),	Number of cases in which nisi decrees had been entered at that date,	Number of cases in which nisi decrees were entered during the year 1893,	Number of cases in which nisi decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893,	Number of cases finally determined in 1893,	Number of cases finally determined in 1893,
	2,321	800	1,577	503	1,041	1,350				

Divorces.	NUMBER OF YEARS MARRIED.									
	Under 6 mos.	Under 1 year.	1 to 5	5 to 10	10 to 20	20 to 30	Over 30	Unk.	Aggregate.	Average.
Granted.	106	11	49	113	4	22	7	53	191	307
Refused.	1	1	7	193	4	31	6	50	1	25
Discontinued or dismissed.	1	1	7	193	4	31	6	50	1	25
Extreme cruelty.	40	4	36	1	25	11	3	11	402	10.05





DIVORCES, 1893 — Continued.

BARNSTABLE,	{	Number of libels pending Jan. 1, 1893 (including all cases, whether decrees <i>not</i> had been entered or not),	.	.	.	.	.	.	17
	"	" pending Jan. 1, 1893, in which decrees <i>not</i> had been entered at that date,	.	.	.	.	.	.	9
	"	" filed during the year 1893,	.	.	.	.	.	.	12
	"	" in which decrees <i>not</i> were entered during the year 1893,	.	.	.	.	.	.	8
	{	Number of cases in which <i>not</i> decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893,	.	.	.	.	.	.	11
	{	Number of cases finally determined in 1893,	.	.	.	.	.	.	17

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCE.			NUMBER OF YEARS MARRIED.								Aver- age.	
	No.	SEX.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.	1 to 5	5 to 10	10 to 20	20 to 30	Over 30	Unk.		Aggre- gate.
Adultery, . . .	3	{ Males, Fem.,.	2 1	2 1	1 -	- -	1 1	- -	1 1	1 -	- -	- -	- -	- -	16	5.33	
Cruel and abusive treatment, . . .	2	Fem.,.	2	2	1	-	1	-	1	1	-	-	-	-	15	7.50	
Desertion, . . .	12	{ Males, Fem.,.	6 6	1 1	3 5	- -	3 1	- -	- 1	1 2	1 2	1 2	- -	- -	147	12.25	
Totals, . . .	17	{ Males, Fem.,.	8 9	3 4	4 6	- -	4 3	- -	1 3	5 1	1 3	1 2	- -	- -	178	10.48	

BERKSHIRE, { Number of libels pending Jan. 1, 1893 (including all cases, whether decrees nisi had been entered or not), . . . . . 89  
" " pending Jan. 1, 1893, in which decrees nisi had been entered at that date, . . . . . 43  
" " filed during the year 1893, . . . . . 42  
" " in which decrees nisi were entered during the year 1893, . . . . . 26  
Number of cases in which nisi decrees had been entered (whether pending January 1, or since entered), which were finally disposed  
of during the year 1893, . . . . . 40  
Number of cases finally determined in 1893, . . . . . 59

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCE.			NUMBER OF YEARS MARRIED.								Aver- age.	
	No.	Sex.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.	1 to 5	5 to 10	10 to 20	20 to 30	Over 30	Unk.		Aggre- gate.
Adultery, . . .	13	{ Males, Fem.,.	7 6	2 -	3 3	1 1	3 2	- -	- -	3 5	4 1	- -	- -	- -	- -	132	10-15
Cruel and abusive treatment, . . .	13	{ Males, Fem.,.	2 11	- 2	1 7	- 2	1 2	- -	- -	- 4	- 2	2 3	- 1	- -	- 1	115*	9-58
Desertion, . . .	24	{ Males, Fem.,.	11 13	3 -	9 10	1 -	1 3	- -	- -	3 2	3 5	2 5	2 1	1 -	- -	279	11-63
Extreme cruelty, . . .	3	{ Males, Fem.,.	2 1	1 -	1 -	- -	1 1	- -	- -	- -	1 -	1 1	- -	- -	- -	26	8-67
Intoxication, . . .	4	Fem.,.	4	-	4	-	-	-	-	-	1	2	1	-	-	61	15-25
Non-support, . . .	2	Fem.,.	2	-	1	1	-	-	-	1	-	1	-	-	-	18	9-00
Totals, . . .	59	{ Males, Fem.,.	22 37	6 2	14 25	2 4	6 8	- -	- -	3 7	7 13	9 13	2 3	1 -	- 1	631†	10-88

\* Twelve cases; aggregate given. † Aggregate and average of fifty-eight cases.

### DIVORCES, 1893 — Continued.

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	Under § 1000.	NUMBER OF YEARS MARRIED.	Aver- age.
	No.	Sex.					
Adultery, . . . . .	25	{ Males, Fem., .	14 11	4 4	- -		9.52
Cruel and abusive treatment, . . . . .	16	{ Males, Fem., .	1 15	- 2	- -		8.13
Desertion, . . . . .	38	{ Males, Fem., .	16 22	2 4	- -		13.11
Extreme cruelty, . . . . .	2	Fem., .	2	1	-		12.50
Imprisonment, . . . . .	1	Fem., .	1	-	-		10.00
Intoxication, . . . . .	16	{ Males, Fem., .	3 13	1 3	- -		10.81



# Divorces, 1893 — Continued.

ESSEX.

Number of Wives pending Jan. 1, 1893 (including all cases, whether decrees nisi had been entered or not), . . . . . 239  
 " " pending Jan. 1, 1893, in which decrees nisi had been entered at that date, . . . . . 122  
 " " filed during the year 1893, . . . . . 306  
 " " in which decrees nisi were entered during the year 1893, . . . . . 134  
 Number of cases in which decrees nisi had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893, . . . . . 122  
 Number of cases finally determined in 1893, . . . . . 145

CAUSES.	DIVORCE.				NUMBER OF YEARS MARRIED.									
	Not com- tested.	Granted.	Refused.	Discon- tinued or dis- missed.	Under 6 mos.	Under 1 year.	1 to 5	5 to 10	10 to 20	20 to 30	Over 30	Unk.	Aggre- gate.	Aver- age.
Adultery, . . . . .	29	13 Males, 16 Fem.,	11 14	2 2	- -	- -	4 4	3 2	6 7	- 1	- 2	- -	333	11-48
Cruel and abusive treatment, . . . . .	18	18 Fem.,	18	-	-	-	6	7	5	-	-	-	123	6-83
Desertion, . . . . .	75	33 Males, 42 Fem.,	29 37	4 2	- -	- -	3 4	16 15	11 15	2 7	1 1	- -	868	11-57
Extreme cruelty, . . . . .	6	6 Fem.,	3	3	-	-	1	3	1	1	-	-	60	10-00
Imprisonment, . . . . .	1	1 Males,	1	-	-	-	1	-	-	-	-	-	1	1-00
Intoxication, . . . . .	16	3 Males, 13 Fem.,	2 11	1 2	- -	- -	- 2	- -	2 7	1 4	- -	- -	243	15-19
Non-support, . . . . .	3	3 Fem.,	2	1	-	-	2	1	-	-	-	-	14	4-67
Totals, . . . . .	148	50 Males, 98 Fem.,	43 88	7 10	- -	- -	8 19	19 28	19 35	8 13	1 3	- -	1,642	11-09

FRANKLIN,

Number of libels pending Jan. 1, 1893 (including all cases, whether decrees nisi had been entered or not),

" " pending Jan. 1, 1893, in which decrees nisi had been entered at that date,

" " filed during the year 1893,

" " in which decrees nisi were entered during the year 1893,

Number of cases in which nisi decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893,

Number of cases finally determined in 1893,

27

14

26

16

10

11

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCE.			NUMBER OF YEARS MARRIED.									Aver- age.
	No.	Sex.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.	1 to 5	5 to 10	10 to 20	20 to 30	Over 30	Unk.	Aggre- gate.	
Adultery, . . . . .	2	Fem, .	2	-	2	-	-	-	-	-	2	-	-	-	-	36	18.00
Desertion, . . . . .	6	{ Males, Fem.,..	4	-	4	-	-	-	-	-	1	2	1	-	{	104	17.33
			2	1	1	-	-	-	-	-	1	-	1	-			
Extreme cruelty, . . . . .	2	Fem, .	-	2	1	-	1	-	1	-	1	-	-	-	-	17	8.50
Intoxication, . . . . .	1	Fem.,..	1	-	1	-	-	-	-	-	-	-	-	-	-	8	8.00
Totals, . . . . .	11	{ Males, Fem.,..	4 4	- 3	4 6	- 1	- -	- -	- 1	1 2	2 3	1 1	- -	{	165	15.00	

# DIVORCES, 1893 — Continued.

Number of libels pending Jan. 1, 1893	whether decrees nisi had been entered or not),	140
" " pending Jan. 1, 1893	if had been entered at that date,	60
" " filed during the year		37
" " in which decrees nisi were entered during the year 1893		51
Number of cases in which nisi decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893,		75
Number of cases finally determined in 1893,		94

## HAMPDEN,

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested	DIVORCE.			NUMBER OF YEARS MARRIED.										Aver- age.
	No.	SEX.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.	1 to 3	5 to 10	10 to 20	20 to 30	Over 30	Unk.	Aggre- gate.		
Adultery,*	19	{ Males, Fem.,.	9 10	8 7	1 3	6 8	- -	3 2	- -	- -	3 3	2 5	2 2	2 -	- -	- -	167	8-79
Cruel and abusive treatment,	16	{ Males, Fem.,.	1 15	1 12	- 3	- 12	- -	1 3	- -	- -	1 4	- 5	- 2	- 4	- -	- -	166	10-38
Desertion,.	28	{ Males, Fem.,.	9 19	7 17	2 2	8 17	- -	1 2	- -	- -	1 1	2 3	3 12	2 -	1 3	- -	405	14-46
Extreme cruelty,	3	Fem.,.	3	3	-	2	-	1	-	-	-	1	1	1	-	-	37	12-33
Intoxication,	27	{ Males, Fem.,.	6 21	3 18	3 3	3 17	- -	3 4	- -	1 -	- 5	- 6	5 6	- 4	- -	- -	314	11-63
Non-support,	1	Fem.,.	1	1	-	1	-	-	-	-	1	-	-	-	-	-	4	4-00
Totals,	94	{ Males, Fem.,.	25 69	19 58	6 11	17 57	- -	8 12	- -	1 -	5 14	4 20	10 23	4 9	1 3	- -	1,093	11-63

\* In one case district attorney notified.

HAMPSHIRE, { Number of libels pending Jan. 1, 1893 (including all cases, whether decrees nisi had been entered or not), . . . . . 66  
 " " " pending Jan. 1, 1893, in which decrees nisi had been entered at that date, . . . . . 14  
 " " " filed during the year 1893, . . . . . 17  
 " " " in which decrees nisi were entered during the year 1893, . . . . . 16  
 " " " in which decrees nisi had been entered (whether pending January 1, or since entered), which were finally disposed  
 " " " in 1893, . . . . . 16  
 " " " in 1893, . . . . . 16

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCE.			NUMBER OF YEARS MARRIED.								Aver- age	
	No.	Sex.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.	1 to 5	6 to 10	11 to 20	21 to 30	Over 30	Unk.		Aggre- gate
Adultery, . . . . .	2	{ Males, Fem.,.	1 1	- -	1 1	- -	- -	- -	- -	- 1	- -	- -	1 -	- -	- -	32	16.00
Cruel and abusive treatment, . . . . .	1	Fem.,.	1	-	1	-	-	-	-	-	-	1	-	-	-	16	16.00
Desertion, . . . . .	10	{ Males, Fem.,.	4 6	- -	4 5	- -	- 1	- -	- -	- 3	- 2	- -	1 -	- 1	- -	130	13.00
Imprisonment, . . . . .	1	Fem.,.	1	-	1	-	-	-	-	-	-	-	1	-	-	25	25.00
Intoxication, . . . . .	1	Fem.,.	1	-	1	-	-	-	-	-	-	1	-	-	-	8	8.00
Non-support, . . . . .	1	Fem.,.	1	-	1	-	-	-	-	-	-	1	-	-	-	12	12.00
Totals, . . . . .	16	{ Males, Fem.,.	5 11	- -	5 10	- -	- 1	- -	- -	- 4	- 1	3 4	2 1	- 1	- -	223	13.94



# DIVORCES, 1893 — Continued.

Number of libels pending Jan. 1, 1893 . . . . . whether decrees *not* had been entered or not), . . . . . 140  
 " " " pending Jan. 1, 1893 . . . . . i had been entered at that date, . . . . . 50  
 " " " filed during the year . . . . . 87  
 " " " in which decrees *were* entered during the year 1893 . . . . . 51  
 Number of cases in which *not* decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893, . . . . . 76  
 Number of cases finally determined in 1893, . . . . . 94

## HAMPDEN.

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCE.			NUMBER OF YEARS MARRIED.									
	No.	SEX.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.	1 to 5	5 to 10	10 to 20	20 to 30	Over 30	Unk	Aggre- gate.	Aver- age.
Adultery,*	19	{ Males, Fem.,.	9 10	8 7	1 3	6 8	- -	3 2	- -	3 3	2 5	2 2	2 -	- -	- -	167	8.79
Cruel and abusive treatment, .	16	{ Males, Fem.,.	1 15	1 12	- 3	- 12	- -	1 3	- -	1 4	- 5	- 2	- 4	- -	- -	166	10.38
Desertion,.	28	{ Males, Fem.,.	9 19	7 17	2 2	8 17	- -	1 2	- -	1 1	2 3	3 12	2 -	1 3	- -	405	14.46
Extreme cruelty,	3	Fem.,.	3	3	-	2	-	1	-	-	1	1	1	-	-	87	12.33
Intoxication, .	27	{ Males, Fem.,.	6 21	3 18	3 3	3 17	- -	3 4	1 -	- 5	- 6	5 6	- 4	- -	- -	314	11.63
Non-support, .	1	Fem.,.	1	1	-	1	-	-	-	1	-	-	-	-	-	4	4.00
Totals, .	94	{ Males, Fem.,.	25 69	19 58	6 11	17 57	- -	8 12	1 -	5 14	4 20	10 23	4 9	1 3	- -	1,093	11.63

\* In one case district attorney notified.

HAMPSHIRE, { Number of libels pending Jan. 1, 1893 (including all cases, whether decrees nisi had been entered or not), . . . . . 56  
" " pending Jan. 1, 1893, in which decrees nisi had been entered at that date, . . . . . 14  
" " filed during the year 1893, . . . . . 17  
" " in which decrees nisi were entered during the year 1893, . . . . . 16  
Number of cases in which nisi decrees had been entered (whether pending January 1, or since entered), which were finally disposed  
of during the year 1893, . . . . . 16  
Number of cases finally determined in 1893, . . . . . 16

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCE.			NUMBER OF YEARS MARRIED.								Aver- age	
	No.	SEX.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.	1 to 5	5 to 10	10 to 20	20 to 30	Over 30	Unk.		Aggre- gate
Adultery, . . . . .	2	{ Males, Fem.,.	1 1	- -	1 1	- -	- -	- -	- 1	- -	- -	1 -	- -	- -	- -	32	16-00
Cruel and abusive treatment, . . . . .	1	Fem.,.	1	-	1	-	-	-	-	-	-	-	-	-	-	16	16-00
Desertion, . . . . .	10	{ Males, Fem.,.	4 6	- -	4 5	- -	1	- -	- 3	- -	3 2	1 -	- 1	- -	- -	130	13-00
Imprisonment, . . . . .	1	Fem.,.	1	-	1	-	-	-	-	-	-	1	-	-	-	25	25-00
Intoxication, . . . . .	1	Fem.,.	1	-	1	-	-	-	-	-	1	-	-	-	-	8	8-00
Non-support, . . . . .	1	Fem.,.	1	-	1	-	-	-	-	-	1	-	-	-	-	12	12-00
Totals, . . . . .	16	{ Males, Fem.,.	5 11	- -	5 10	- -	1	- 1	- 4	- 1	3 4	2 1	- 1	- -	- -	223	13-94

## DIVORCES, 1893 — Continued.

MIDDLESEX,	Number of libels pe	uses, whether decrees nisi had been entered or not),	401
	" " pe	as nisi had been entered at that date,	102
	" " in	uring the year 1893,	217
	Number of cases in which nisi decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893,		106
Number of cases finally determined in 1893,			203
			525

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCE.		NUMBER OF YEARS MARRIED.						Aver- age.			
	No.	SEX.			Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.			Over 20	Final	Aggre- gate.				
Adultery, . . . . .	58	{ Males, Fem.,.	29 29	9 6	7 2			2 -	6 6	8 10	11 11	2 3	- -	{ -}	591	10-19
Cruel and abusive treatment, . . . . .	25	Fem.,.	25	4	3			-	6	7	9	3	-	-	270	10-80
Desertion, . . . . .	106	{ Males, Fem.,.	39 67	4 4	2 3			-	6 7	16 26	12 26	4 5	1 3	{ -}	1,242	11-72
Extreme cruelty, . . . . .	4	Fem.,.	4	1	-			-	1	2	1	-	-	-	28	7-00
Imprisonment, . . . . .	1	Fem.,.	1	-	-			-	-	-	1	-	-	-	11	11-00
Impotency, . . . . .	2	Fem.,.	2	2	1			-	1	-	-	-	-	-	4	2-00
Intoxication, . . . . .	27	{ Males, Fem.,.	3 24	2 4	- 3			-	1 2	1 5	- 12	1 4	- 1	{ -}	325	12-04
Non-support, . . . . .	2	Fem.,.	2	-	-			-	-	1	1	-	-	-	24	12-00
Totals, . . . . .	225	{ Males, Fem.,.	71 154	16 21	9 12	2 2	- 1	2 -	13 22	25 51	23 61	7 15	1 4	{ -}	2,495	11-09

NANTUCKET,

{

Number of libels pending Jan. 1, 1893 (including all cases, whether decrees nisi had been entered or not), . . . . . 3

" " pending Jan. 1, 1893, in which decrees nisi had been entered at that date, . . . . . 2

" " filed during the year 1893, . . . . . 1

" " in which decrees nisi were entered during the year 1893, . . . . . 2

Number of cases in which nisi decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893, . . . . . 2

Number of cases finally determined in 1893, . . . . . 2

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCE.			NUMBER OF YEARS MARRIED.								Aver- age.	
	No.	Sex.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 1 year.	1 to 5	5 to 10	10 to 20	20 to 30	Over 30	Unk.	Aggre- gate.		
Cruel and abusive treatment, . . .	1	Fem.,.	1	-	1	-	-	-	-	1	-	-	-	-	-	9	9.00
Desertion,. . .	1	Males,	-	1	1	-	-	-	-	-	1	-	-	-	-	18	18.00
Totals, . . .	2	{ Males, Fem.,.	1 1	1 -	1 1	- -	- -	- -	- -	- 1	1 -	- -	- -	- -	- - }	27	13.50

DIVORCES, 1893 — Continued.

NORFOLK,	Number of libels pending Jan. 1, 1893 (including all cases, whether decrees <i>not</i> had been entered or not),	.	.	.	.	.	.	90
	" " pending Jan. 1, 1893, in which decrees <i>not</i> had been entered at that date,	.	.	.	.	.	.	22
	" " filed during the year 1893,	.	.	.	.	.	.	40
	" " in which decrees <i>not</i> were entered during the year 1893,	.	.	.	.	.	.	27
	Number of cases in which <i>not</i> decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893,	.	.	.	.	.	.	29
	Number of cases finally determined in 1893,	.	.	.	.	.	.	37

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCE.			NUMBER OF YEARS MARRIED.								Aver- age.	
	No.	SEX.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.	1 to 5	5 to 10	10 to 20	20 to 30	Over 30	Unk.		Aggre- gate.
Adultery, . . .	6	{ Males, Fem.,.	5 1	2 —	3 1	2 —	— —	3 1	— —	1 —	— —	1 1	2 —	1 —	— —	126	21·00
Cruel and abusive treatment, . . .	1	Fem.,.	1	1	—	1	—	—	—	—	—	1	—	—	—	13	13·00
Desertion,. . .	19	{ Males, Fem.,.	4 15	2 15	2 —	4 13	— —	— 2	— —	— 2	1 3	2 6	1 2	— 2	— —	324	17·05
Extreme cruelty, . . .	3	Fem.,.	3	1	2	2	—	1	—	1	1	—	1	—	—	32	10·67
Intoxication, . . .	7	{ Males, Fem.,.	1 6	— 5	1 1	1 6	— —	— —	— —	— 2	— 3	1 1	— —	— —	— —	62	8·86
Nullity of marriage,	1	Fem.,.	1	1	—	1	—	—	—	1	—	—	—	—	—	3	3·00
Totals, . . .	37	{ Males, Fem.,.	10 27	4 23	6 4	7 23	— —	3 4	— —	1 6	1 7	4 9	3 3	1 2	— —	560	15·14

PLYMOUTH, { Number of libels pending Jan. 1, 1893 (including all cases, whether decrees nisi had been entered or not), . . . . . 60  
 " " pending Jan. 1, 1893, in which decrees nisi had been entered at that date, . . . . . 41  
 " " filed during the year 1893, . . . . . 60  
 " " in which decrees nisi were entered during the year 1893, . . . . . 44  
 " " in which nisi decrees had been entered (whether pending January 1, or since entered), which were finally disposed  
 " " Year 1893, . . . . . 63  
 " " finally determined in 1893, . . . . . 64

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCES.			NUMBER OF YEARS MARRIED.								Aver- age.	
	No.	Sex.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.	1 to 5	6 to 10	11 to 20	21 to 30	Over 30	Unk.		Aggre- gate.
Adultery, . . .	11	{ Males, Fem.,.	8 3	- -	6 3	- -	2 -	- -	- -	2 -	2 1	3 1	- -	1 -	- -}	118	10.73
Cruel and abusive treatment, . . .	13	Fem.,.	13	1	12	-	1	-	-	4	3	3	1	1	-	123	9.46
Desertion, . . .	31	{ Males, Fem.,.	17 14	- -	16 13	- -	1 1	- -	- -	1 1	6 7	9 4	1 1	1 1	- -}	412	13.29
Intoxication, . . .	8	{ Males, Fem.,.	1 7	1 -	- 7	- -	1 -	- -	- 1	- 1	- 1	1 1	- 2	- 1	- -}	114	14.25
Non-support, . . .	1	Fem.,.	1	-	1	-	-	-	-	1	-	-	-	-	-	3	3.00
Totals, . . .	64	{ Males, Fem.,.	26 38	1 1	22 36	- -	4 2	- -	- 1	3 7	7 13	13 9	1 4	2 3	- -}	770	12.03

# DIVORCES, 1893 — Concluded.

SUFFOLK,	Number of libels		uses, whether decrees nisi had been entered or not),	.	.	.	.	.	599
	" "		is nisi had been entered at that date,	.	.	.	.	.	196
	" "		" "	.	.	.	.	.	445
	" "		in which decrees nisi were entered during the year 1893,	.	.	.	.	.	231
	Number of cases in which nisi decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893,		.	.	.	.	.	.	266
Number of cases finally determined in 1893,		.	.	.	.	.	.	.	336

CASES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCE.			NUMBER OF YEARS MARKED.						Aver- age.
	No.	SEX.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.	1 to 2	2 to 3	3 to 4	4 to 5	
Adultery, . . .	89	{ Males, Fem., .	38	16	38	6	4	1	-	18	15	13	5	10.57
Cruel and abusive treatment, . . .	43	{ Males, Fem., .	37	4	36	1	4	-	1	8	12	15	4	10.35
Desertion, . . .	144	{ Males, Fem., .	2	-	-	1	1	2	1	-	1	1	5	12.97
Extreme cruelty, . . .	16	{ Males, Fem., .	33	8	43	2	2	-	-	9	16	22	4	9.13
Intoxication, . . .	34	{ Males, Fem., .	41	6	92	1	4	-	-	3	16	31	18	11.21
Non-support, . . .	5	{ Males, Fem., .	94	3	-	-	2	-	-	12	32	1	1	12.00
Nullity of marriage,	5	{ Males, Fem., .	-	2	11	1	2	-	-	4	4	5	2	4.20
Totals, . . .	336	{ Males, Fem., .	11	2	12	-	1	-	-	4	6	9	2	11.49
			5	-	4	1	-	-	-	1	1	3	-	
			1	2	3	-	1	-	1	-	2	-	-	
			1	1	1	-	1	-	-	-	1	-	-	
			83	27	96	9	10	1	1	20	37	42	11	8.862
			202	19	197	6	18	3	2	40	62	79	30	

WORCESTER, { Number of Hbels pending Jan. 1, 1893 (including all cases, whether decrees *not* had been entered or not), . . . . . 280  
" " pending Jan. 1, 1893, in which decrees *not* had been entered at that date, . . . . . 109  
" " filed during the year 1893, . . . . . 129  
" " in which decrees *not* were entered during the year 1893, . . . . . 83  
Number of cases in which *not* decrees had been entered (whether pending January 1, or since entered), which were finally disposed of during the year 1893, . . . . . 141  
Number of cases finally determined in 1893, . . . . . 240

CAUSES.	LIBELLANTS.		Not con- tested.	Con- tested.	DIVORCE.			NUMBER OF YEARS MARRIED.								Unk.	Aggre- gate.	Aver- age.
	No.	SEX.			Granted.	Refused.	Discon- tinued or Dis- missed.	Under 6 mos.	Under 1 year.	1 to 5	5 to 10	10 to 20	20 to 30	Over 30				
Adultery, . . .	48	{ Males, Fem.,.	21 14	9 4	11 12	- -	19 6	- -	4 5	8 7	12 5	2 -	2 1	1 -	528*	11-23		
Cruel and abusive treatment, . .	52	{ Males, Fem.,.	1 38	2 11	- 16	- -	3 33	- -	2 15	1 13	- 18	- 3	- -	- -	463	8-90		
Desertion, . . .	95	{ Males, Fem.,.	23 58	12 2	20 31	- 2	15 27	- -	- 4	15 21	15 22	1 8	4 5	- -	1,314	13-83		
Extreme cruelty, .	1	Fem.,.	1	-	1	-	-	-	-	-	-	-	1	-	31	31-00		
Imprisonment, . .	2	Fem.,.	1	1	1	-	1	-	-	1	1	-	-	-	18	9-00		
Impotency, . . .	2	Fem.,.	1	1	-	-	2	1	1	-	-	-	-	-	1	.50		
Intoxication, . .	36	{ Males, Fem.,.	- 29	4 3	- 19	- -	4 13	- -	- 6	1 10	2 10	- 5	1 1	- -	454	12-61		
Non-support, . .	4	Fem.,.	4	-	3	-	1	-	1	2	1	-	-	-	25	6-25		
Totals, . . .	240	{ Males, Fem.,.	45 146	27 22	31 83	- 2	41 83	- 1	6 32	25 54	29 57	3 16	7 8	1 -	2,834	11-86		

\* Forty-seven cases; aggregate given.





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**MEDICAL EXAMINERS' RETURNS.**

**1893.**

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MEDICAL EXAMINERS' RETURNS.

TABLE I.—BY STATE AND COUNTIES.

*Exhibiting the Number of Deaths from Accident or Negligence, Suicide, Homicide, and Other Causes in Each County, which have been Investigated during the Year 1893, under the Medical Examiner Laws.*

	Percentage.	STATE.	Barnstable.	Berkshire.	Bristol.	Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
Number of deaths investigated,	100·00	2,221	39	67	264	3	243	45	179	36	336	2	76	47	601	283
I. HOMICIDE.																
Totals,	3·42	76	1	4	11	—	3	2	5	1	6	—	2	—	31	10
Abortion,	—	13	—	1	1	—	1	1	—	—	—	—	—	—	8	1
Infanticide,	—	6	—	1	1	—	—	—	1	—	1	—	—	—	1	1
Weapons.																
Fire-arms,	—	18	—	2	1	—	1	—	1	—	1	—	—	—	9	3
Stabbing,	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Poisons,	—	4	—	—	1	—	—	—	—	—	—	—	—	—	3	—
Other methods,	—	34	1	—	7	—	1	1	3	1	4	—	2	—	10	4
II. SUICIDE.																
Totals,	13·06	290	3	9	22	—	32	7	19	8	46	—	13	11	92	28



TABLE I.—Concluded.

	Percentage.	STATE.	Barnstable.	Berkshire.	Bristol.	Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.
IV. CAUSES NOT DUE TO VIOLENCE.																
Alcoholism, . . . . .	4.64	103	—	—	8	—	21	2	6	1	15	—	2	1	39	8
Natural causes, . . . . .	33.18	737	8	19	144	2	80	14	68	11	124	1	22	17	132	95
Causes unknown or ill-defined, . . . . .	1.76	39	—	—	5	—	10	1	10	2	4	—	—	1	2	4
AUTOPSIES, . . . . .	—	269	1	6	41	—	12	2	22	2	27	—	4	4	123	25



TABLE II. — Continued.

CAUSES OF DEATH.	SEX.	MONTHS.												DEATHS.				AGES.															
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Unknown.	Totals.	Under 1 week.	1 year.	1 to 5 yrs.	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	Over 80	Unknown.		
DEATHS FROM VIOLENCE.																																	
CRIMINAL VIOLENCE.																																	
I. HOMICIDE, . . . . .	{ Males, . { Fem., .	2 5	2 1	1 5	3 3	3 2	3 4	5 4	7 2	3 4	3 2	2 4	38 .	33 .	.	76	2 6	1 .	1 .	2 .	4 3	9 12	11 7	5 3	2 3	1 2	1 1	1 .	1 .	1 .	1 .	1 .	
By weapons.																																	
—Shooting, . . . . .	{ Males, . { Fem., .	1 1	1 .	1 1	1 .	2 .	1 1	1 .	2 .	1 1	1 .	1 .	18 .	6 .	.	18	1 .	1 .	1 .	1 .	4 .	3 .	8 2	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	
—Stabbing, . . . . .	Males, .	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
—Other wounds: incised, crush- ing or otherwise, . . . . .	{ Males, . { Fem., .	1 .	1 .	1 .	1 .	1 .	2 .	1 .	1 1	1 .	1 .	1 .	8 .	2 .	.	10	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	
By falls and blows, . . . . .	{ Males, . { Fem., .	1 .	1 .	1 .	1 1	1 1	1 .	3 1	4 1	1 1	1 .	1 3	14 .	9 .	.	23	1 .	1 .	1 .	2 .	4 .	4 .	4 .	2 1	2 2	1 .	1 .	1 .	1 .	1 .	1 .	1 .	
By smothering and strangulation,	Fem., .	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Poisons, . . . . .	Fem., .	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Abortion, . . . . .	Fem., .	4	2	2	1	1	1	2	1	2	1	1	13	4	1	13	1	1	1	1	3	6	4	1	1	1	1	1	1	1	1	1	1
Infanticide, . . . . .	{ Males, . { Fem., .	1 .	1 .	1 1	1 1	1 .	1 .	1 1	1 .	1 .	1 .	1 .	2 .	4 .	.	6	2 4	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .	1 .
VIOLENCE (NOT CRIMINAL).																																	
II. SUICIDE, . . . . .	{ Males, . { Fem., .	17 1	14 5	19 7	15 7	18 7	23 5	26 5	18 4	23 10	16 4	16 4	228 .	62 .	.	290	1 .	1 .	1 .	1 .	5 2	37 17	52 17	47 9	33 8	36 1	10 8	7 .	1 .	1 .	1 .	1 .	1 .
By weapons.																																	
—Fire-arms, . . . . .	{ Males, . { Fem., .	6 .	7 .	5 2	5 .	8 .	6 1	5 .	6 .	10 1	6 .	5 1	74 .	6 .	.	80	1 .	1 .	1 .	1 .	3 .	12 1	15 2	16 .	15 .	8 .	3 .	2 .	2 .	2 .	2 .	2 .	2 .

[illegible]



**TABLE II. — Continued.**

CAUSES OF DEATH.	SEX.	MONTHS.												DEATHS.				AGES.																
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Unknown.	Totals.	Under 1 week.	1 week to 1 year.	1 to 5 yrs.	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	Over 80	Unknown.		
III. ACCIDENT OR NEGLIGENCE — Con.																																		
Public travel.																																		
— Railroad accidents, . . .	{ Males, . Fem., .	20 1	30 1	31 —	23 1	29 1	26 1	42 2	27 5	27 2	34 1	16 2	27 1	349	18	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
— Horse railroad, . . .	Males, .	—	—	—	1	—	—	—	—	—	—	—	—	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
— Electric railroad, . . .	{ Males, . Fem., .	—	—	—	2	—	1	1	2	4	—	—	—	16	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
— Other vehicles, . . .	{ Males, . Fem., .	4 3	1 —	1 —	—	3	7	6	6	5	1	1	2	43	9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
— Horses, . . .	{ Males, . Fem., .	2 —	—	1	2	—	1	1	—	1	1	—	1	10	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Burns, scalds and explosions, . . .	{ Males, . Fem., .	4 3	2 1	—	—	2	1	1	2	2	1	1	3	36	18	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Falls and blows, . . .	{ Males, . Fem., .	7 2	2 —	4 1	4 —	4 —	7 4	15 2	15 2	6 —	7 1	4 1	2 3	86	70	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Falling bodies, . . .	{ Males, . Fem., .	1 —	3 —	—	1	2	1	2	4	2	1	5	2	26	24	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Asphyxia.																																		
— Drowning, . . .	{ Males, . Fem., .	4 —	4 —	8 1	7 5	22 5	33 6	51 2	84 3	19 2	9 1	6 1	24	247	26	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
— Overlaying and asphyxia in bed, . . .	{ Males, . Fem., .	2 2	2 4	3 2	3 —	—	1	—	—	1	—	—	1	28	14	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
— In burning buildings, . . .	{ Males, . Fem., .	4 —	4 —	6 1	—	—	—	—	—	—	—	—	2	14	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

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# EDITORIAL OBSERVATIONS

BY

FRANCIS A. HARRIS, M.D.

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# FIFTY-SECOND REGISTRATION REPORT.

## (1893.)

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The following observations upon the statistics of the Births, Marriages and Deaths registered in Massachusetts in the year 1893, together with some comments upon the Statistics of Divorce and the Returns of the Medical Examiners, are intended to set forth the principal points of interest derived from a study of the figures, and to furnish some comparisons between the statistics of the year 1893 and those of other years, and to render these statistics, if possible, “of practical utility.”

In the report for this year, as in those for the years 1891 and 1892, some tables printed in former reports which seemed superfluous are omitted from the first part of the report; and many tables are dropped from the editorial summary, because not only is their practical utility problematical, but also because they were to a large extent repetitions of matter which had been published year after year. Very many of these omitted tables contained deductions based upon a population whose number was merely hypothetical; and while it is necessary for approximate accuracy to make comparisons in certain particulars based upon such an estimate of the number of the population, it seems better to publish a very great number of tables of comparisons only in the years when the number of the population shall have been accurately ascertained by census, either State or national.

In this report the facts obtained by a review of the statistics are stated concisely, and the comparisons made are similar to those made in former reports, without the publication of masses of figures which inspection has shown to be not wholly free from error.



The size of the report for the year 1895 will undoubtedly be much larger, and contain many more tables of comparative statistics. It may be fairly said, however, that the reduction of the size of the report in the non-census years has commended itself to the people of the State.

To any one unfamiliar with the work of the preparation of a report like this, the difficulty of a complete avoidance of error would seem almost incredible; yet this difficulty is attested by most if not all of the former registration reports. It may be said of the report for the year 1893 that the figures and comparisons have been made with the greatest care, and that they have been reviewed by an able and experienced statistician wholly familiar with vital statistics, and it is hoped that the report is free from error.

The same care was exercised in the report for 1892, yet in spite of it the editor is obliged to admit the discovery of two slight errors after the report was issued. These errors are corrected in the report for this year.

For the purpose of ascertaining the ratios for births, marriages and deaths for the year 1893, the number of the population is assumed to be 2,438,363.

BIRTHS.

The number of living births registered in the year 1893 was 67,192, which was larger by 1,368 than the number reported in the year 1892, and larger than that of any other year since the beginning of registration in Massachusetts. The excess of living births over the number of deaths was 18,108. It was greater than the excess of any other year. The rate for living births, as calculated on the basis of a population whose number is estimated to be 2,438,363, in 1893 was 27·55 to each 1,000 of the living population. This indicates that there was born alive one child to each 36 persons, and a daily average of 184 births.

The birth-rate, 27·55, is less than that of the year 1892, but is larger than that of any other year since 1874. It was also larger than the average rate for the five-year periods 1876–1880, 1881–1885 and 1886–1890.

The excess of the birth-rate over the death-rate was greater than the similar excess in Ireland, France and Hungary in recent years, but less than that of most other European countries.

In the following table is presented the number of living births and of still-births for a period of ten years (1884–1893) :—

TABLE I.

YEARS.	Born Alive.	Still-born.	Totals.
1884, . . . . .	48,615	1,628	50,243
1885, . . . . .	48,790	1,589	50,379
1886, . . . . .	50,788	1,796	52,584
1887, . . . . .	53,174	1,794	54,968
1888, . . . . .	54,893	1,943	56,836
1889, . . . . .	57,075	2,021	59,096
1890, . . . . .	57,777	2,099	59,876
1891, . . . . .	63,004	2,222	65,226
1892, . . . . .	65,824	2,293	68,117
1893, . . . . .	67,192	2,444	69,636

The birth-rate for 1893, if the number of still-births be included, was 28·55, or 1·00 for still-births alone, as compared with 28·74 and ·97 for the year 1892.

The following table presents the birth-rates for twenty-three years, 1871–1893, in groups of five-year periods : —

TABLE II.

YEARS.							Births to 1,000 of Population.	
1871,	.	.	.	.	.	.	26·60	} 27·58
1872,	.	.	.	.	.	.	28·16	
1873,	.	.	.	.	.	.	28·26	
1874,	.	.	.	.	.	.	28·29	
1875,	.	.	.	.	.	.	26·63	
1876,	.	.	.	.	.	.	25·12	} 24·25
1877,	.	.	.	.	.	.	24·55	
1878,	.	.	.	.	.	.	23·83	
1879,	.	.	.	.	.	.	22·94	
1880,	.	.	.	.	.	.	24·80	
1881,	.	.	.	.	.	.	24·91	} 25·08
1882,	.	.	.	.	.	.	24·73	
1883,	.	.	.	.	.	.	25·17	
1884,	.	.	.	.	.	.	25·45	
1885,	.	.	.	.	.	.	25·12	
1886,	.	.	.	.	.	.	25·37	} 25·81
1887,	.	.	.	.	.	.	25·80	
1888,	.	.	.	.	.	.	25·89	
1889,	.	.	.	.	.	.	26·19	
1890,	.	.	.	.	.	.	25·81	
1891,	.	.	.	.	.	.	27·35	
1892,	.	.	.	.	.	.	27·77	
1893,	.	.	.	.	.	.	27·55	

Table III. presents the number of births for the years 1870–1893, and the birth-rates in census years 1865–1890, by counties. By means of this table the birth-rate of each county for any given census year may be compared with those of other counties in the same year, and with those of the same county in other census years.

TABLE III. — *Births, 1870-1893, and Birth-rates in Census Years 1865-1890, by Counties.*

	Barnstable.	Berkshire.	Bristol.	Dukes.	Essex.	Franklin.	Hampden.	Hampshire.	Middlesex.	Nantucket.	Norfolk.	Plymouth.	Suffolk.	Worcester.	Whole State.
Population, 1865,	34,610	56,944	89,395	4,200	171,084	31,340	64,570	39,269	220,384	4,748	116,306	63,107	208,212	162,912	1,267,031
" 1870,	32,744	64,827	102,886	3,787	200,843	32,635	78,409	44,388	274,353	4,123	89,443	65,365	270,802	192,716	1,457,351
" 1875,	32,144	68,270	131,087	4,071	223,342	33,696	94,304	44,821	284,112	3,201	83,321	69,362	364,886	210,295	1,651,912
" 1880,	31,897	69,032	139,040	4,300	244,535	36,001	104,142	47,232	317,830	3,727	96,507	74,018	387,927	226,897	1,783,085
" 1885,	29,845	73,828	158,498	4,135	263,727	37,449	116,764	48,472	357,311	3,142	102,142	81,680	421,109	244,039	1,942,141
" 1890,	29,172	81,108	186,465	4,369	299,995	38,610	135,713	51,859	431,167	3,268	118,950	92,700	484,780	280,787	2,238,943
Birth-rates, 1865,	22.3	23.6	22.1	20.71	21.8	18.2	24.2	21.1	24.4	10.11	24.8	20.9	27.5	24.5	23.9
Living births, 1870,	669	1,616	2,682	51	4,772	644	1,969	1,019	7,444	48	2,256	1,463	8,614	5,012	38,259
Birth-rates, 1870,	20.4	24.9	26.1	13.47	23.7	19.7	25.1	22.9	27.1	11.64	25.2	22.4	31.8	26.0	26.2
Living births, 1871,	709	1,784	2,766	57	5,114	658	2,235	993	7,289	51	2,316	1,464	9,006	5,349	39,791
" 1872,	669	1,637	3,156	64	6,158	674	2,321	1,095	8,261	56	2,416	1,452	9,761	5,515	43,235
" 1873,	615	1,653	3,328	56	5,686	733	2,527	1,111	8,605	55	2,517	1,549	10,254	5,792	44,481
" 1874,	705	1,688	3,252	52	5,820	735	2,618	1,048	7,994	60	2,173	1,521	12,271	5,694	45,631
" 1875,	659	1,678	3,440	65	5,722	673	2,635	1,035	7,247	57	2,276	1,469	11,582	5,458	43,996
Birth-rates, 1875,	20.5	24.6	26.2	15.97	25.6	20.0	27.9	21.3	25.5	17.81	25.8	21.2	31.7	26.4	26.6
Living births, 1876,	608	1,537	3,220	46	5,216	635	2,443	978	7,140	77	2,024	1,455	11,324	5,451	42,149
" 1877,	607	1,537	3,177	64	5,370	660	2,359	944	7,379	64	2,052	1,459	11,070	5,098	41,850
" 1878,	578	1,508	3,171	54	5,369	617	2,273	894	7,264	69	2,039	1,338	10,715	5,349	41,238
" 1879,	542	1,527	2,852	34	5,086	637	2,374	946	7,052	59	2,004	1,301	10,742	5,139	40,295
" 1880,	505	1,606	3,560	62	5,815	649	2,645	972	8,030	56	2,074	1,346	11,148	5,749	44,217

<i>Birth-rates,</i>	1880,	15·8	23·8	25·6	14·42	28·8	18·0	25·4	20·6	25·8	15·08	21·4	18·2	28·8	25·4	24·8
<i>Living births,</i>	1881,	485	1,664	4,098	41	5,864	682	2,585	1,005	8,067	60	2,141	1,450	11,124	5,959	45,220
"	1882,	506	1,698	3,799	51	5,927	736	2,756	923	8,087	47	2,229	1,500	11,617	6,794	45,670
"	1883,	508	1,947	4,051	57	6,086	729	2,067	969	8,127	64	2,222	1,445	11,908	6,155	47,285
"	1884,	504	2,005	4,181	45	6,068	709	3,496	979	8,564	57	2,267	1,488	12,063	6,198	48,615
"	1885,	518	1,901	4,190	66	6,070	747	3,482	954	8,843	36	2,329	1,528	12,092	6,034	48,790
<i>Birth-rates,</i>	1885,	17·4	25·7	26·4	15·96	23·0	19·9	29·8	19·7	24·7	11·46	22·8	18·7	23·7	24·7	25·1
<i>Living births,</i>	1886,	489	1,948	4,460	75	6,535	756	3,517	1,101	9,046	36	2,322	1,553	12,596	6,454	50,788
"	1887,	501	2,025	4,597	67	6,861	798	3,645	1,062	9,926	55	2,430	1,595	12,776	6,836	53,174
"	1888,	547	2,159	4,854	55	6,884	740	3,858	1,069	10,105	46	2,487	1,667	13,334	7,088	54,893
"	1889,	539	2,139	4,826	68	7,073	828	4,038	1,092	10,925	52	2,778	1,736	13,525	7,356	57,075
"	1890,	488	2,135	4,958	79	7,104	760	4,136	1,084	11,149	50	2,710	1,758	14,046	7,320	57,777
<i>Birth-rates,</i>	1890,	16·38	26·32	26·58	18·08	23·68	19·68	30·47	20·90	25·85	15·30	22·78	18·96	23·98	26·07	25·81
<i>Living births,</i>	1891,	530	2,179	5,436	56	7,804	813	4,611	1,126	12,347	52	2,947	1,905	15,227	7,971	63,004
"	1892,	546	2,083	5,924	71	7,784	898	4,708	1,229	12,879	50	2,956	1,946	16,542	8,208	65,824
"	1893,	516	2,283	6,200	73	8,392	908	4,864	1,194	13,197	55	3,132	2,144	15,538	8,696	67,192

From the figures given in this table it appears that there is considerable uniformity in the birth-rates of the different counties when the birth-rates of the same counties are compared for different census years; while the birth-rates of the different counties present marked variations when compared with each other, Suffolk County having the highest rates, Barnstable, Dukes and Nantucket having the lowest. As compared with the births registered in 1892, there was in 1893 an increase in the number reported from all the counties except Barnstable, Hampshire and Suffolk.

In the following table is shown the relation of the birth-rates to the season of the year, in which the data of the year 1892 are compared with the data of 1893 by months and quarters. From this table it appears that the largest number of births in a single month in the year 1893 occurred in August and in the third quarter of the year, and the least number in February and in the second quarter of the year.

TABLE IV. — *Births and Birth-rates, by Months and Quarters, 1892-1893.*

	Births registered in Each Month.		Births registered in Each Quarter.		Monthly Percentage of Births.		Quarterly Percentage of Births.	
	1892.	1893.	1892.	1893.	1892.	1893.	1892.	1893.
January, .	5,426	5,611	} 15,907	16,267	{ 8.3	8.4	} 24.2	24.2
February, .	5,043	5,107			{ 7.6	7.6		
March, .	5,438	5,549			{ 8.3	8.3		
April, .	5,220	5,391	} 15,691	16,011	{ 8.0	8.0	} 23.8	23.8
May, .	5,342	5,163			{ 8.1	7.7		
June, .	5,129	5,457			{ 7.8	8.1		
July, .	5,895	6,095	} 17,318	17,906	{ 9.0	9.0	} 26.3	26.7
August, .	5,833	6,173			{ 8.9	9.2		
September, .	5,590	5,638			{ 8.5	8.4		
October, .	5,330	5,716	} 16,896	17,002	{ 8.0	8.5	} 25.7	25.3
November, .	5,576	5,519			{ 8.4	8.2		
December, .	5,990	5,767			{ 9.1	8.6		
The Year,	65,812	67,186	65,812*	67,186	100.0	100.0	100.0	100.0

\* From this table are omitted in calculation 12 births, occurring in 1892, and 6 births, occurring in 1893, the date of which is unspecified.

The statistics in regard to the sex of children born alive appear to show that the ratio of males to females (exclusive of the cases where the sex was not stated) was 104·6, as compared with 105·6 in 1892, 106·8 in 1891, 104·6 in 1890 and 103·6 in 1889.

The ratio of males to females among the still-born, where the sex was reported, was 154·2, as compared with 162·1 in 1892 and 158·0 in 1891.

The ratio of male to female births among the illegitimate births was in 1893, 103·8, as compared with 107·4 in 1892, 100·5 in 1891 and 108·2 in 1890 and 1889.

The excess of children born of foreign parentage over those of native parentage in 1893 was 9,660, which was greater by 1,565 than the excess of the same class in 1892, and was greater than the excess of any previous year since the beginning of registration.

The number of children born of mixed parentage was 13,669, which was 17 less than the number of this class reported in 1892, but was greater than that of any year previous to 1892.

There was an increase in the number of children born of mixed parentage in every county except Barnstable, Dukes, Essex, Hampshire, Nantucket and Suffolk. Comparison of the statistics of 1893 with those of former years shows that the percentage of native-born children has decreased with considerable uniformity since 1849, and that the percentage (32·43) was less in 1893 than in any year since the beginning of registration. The percentage of children born of foreign parentage (46·80) was greater than that of any previous year since 1875. The percentage of children born of mixed parentage (20·34) was slightly less than that of the years 1888, 1889, 1890, 1891 and 1892, but greater than that of any other year since 1870. This percentage, 20·34, was less than the average for the four years 1889–1892, which was 20·89, but it is greater than the average for the period 1849–1889.

*Plural Births.* — In the year 1893, 1,247 children were born of 619 mothers. Of this number, 1,220 were twins and 27 were triplets. The number of offspring of plural births in 1893 was greater than that of any previous year except 1891.



The ratio of twin births to the whole number of living births reported in 1893 was 1 to 110. This ratio is slightly more than the average ratio of the years 1874–1893, which was 1 to 114.

*Illegitimate Births.* — The number of illegitimate births registered in the year 1893 was 540, which was 8·0 per 1,000 of the whole number of living births reported in that year. This was 7·0 per 1,000 less than the number reported in 1892, 9·1 per 1,000 less than the number reported in 1891, and 9·7 per 1,000 less than the average number reported for the ten years 1884–1893.

This very great decrease in the number of illegitimate births does not so much indicate a great increase in morality as it does a different system of making the returns as to illegitimacy. Perhaps no system can be absolutely accurate; but had the method of estimating the legitimacy of births pursued by registrars in former years been followed in 1893, it is not likely that there would appear such a wide margin of difference between the year 1893 and its predecessors.

## MARRIAGES.

The number of marriages registered in Massachusetts in the year 1893 was 22,814, which was 307 more than the number registered in 1892 and 1,139 more than the number registered in 1891, and was also a greater number than was registered in any previous year.

The number of persons registered as married was 18.71 to each 1,000 of the (estimated) population, and the number of marriages to each 1,000 of such population was 9.35.

There was married one person to each 53.4 of the (estimated) population, as compared with one to each 52.6 of the (estimated) population in 1892 and 53.1 of the population (estimated) in 1891.

The following table gives the marriage-rates for the ten years 1884-1893 : —

TABLE V.

YEARS.	Marriages.	Persons Married to 1,000 Living.	Number Living to One Mar- riage.
1884, . . . . .	17,333	18.12	110
1885, . . . . .	17,052	17.56	114
1886, . . . . .	18,018	18.01	111
1887, . . . . .	19,533	18.98	105
1888, . . . . .	19,739	18.65	107
1889, . . . . .	20,397	18.76	107
1890, . . . . .	20,838	18.62	107
1891, . . . . .	21,675	18.81	106
1892, . . . . .	22,507	18.99	105
1893, . . . . .	22,814	18.71	107

The marriage-rate of the year 1893, as calculated on the basis of an estimated population, was .28 less than that of 1892, but .19 greater than the average marriage-rate for the decade 1884-1893.

TABLE VI. — Ages at Marriage of 22,814 Men and of 22,814 Women, 1893.

	Under 20	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	Over 80	Unknown
Men, .	441	8,151	7,476	3,212	1,510	753	482	310	201	128	84	47	18	4	2
Women, .	3,628	10,112	5,307	1,862	935	470	223	133	78	39	18	4	1	—	4

Ages at Marriage of 19,842 Bachelors and of 20,780 Maids.

Men, .	441	8,104	7,147	2,718	951	288	113	48	15	9	3	—	—	2
Women, .	3,622	9,960	4,864	1,419	568	215	74	38	13	3	—	—	—	4

Ages at Marriage of 2,972 Widowers and of 2,034 Widows.

Men, .	—	47	329	494	559	465	369	262	186	119	81	44	13	4	—
Women, .	6	152	443	443	367	255	149	95	65	36	18	4	1	—	—

The approximate average age of 22,814 men married in 1893 was . . . . . 28·82  
“ “ “ of 22,814 women married in 1893 was . . . . . 25·46  
“ “ “ of 19,842 men marrying for the first time in 1893 was . . . . . 26·86  
“ “ “ of 20,780 women marrying for the first time in 1893 was . . . . . 24·39

It appears that more marriages occurred in the month of June than in any other month. There were more marriages solemnized in the second quarter of the year than in any other quarter in 1893. In the years 1890, 1891 and 1892 the largest number of marriages was registered in the month of November, while for the previous ten years, 1883–1892, more marriages were solemnized in the last quarter of the year than in any other quarter.

It further appears that the number of men married who were under twenty years of age (441) was 1·9 per cent. of the whole number married whose ages were reported, which was ·1 per cent. more than the percentage of the same class in 1892 and 1891; and the number of women married who were under twenty years of age was 15·9 per cent. of the whole number married whose ages were reported, as compared with 16 per cent. in 1892 and 16·2 per cent. in 1891.

The number of men married who were between the ages of twenty and twenty-five was 35·7 per cent. of the whole number married, as compared with 36·6 per cent. in 1892 and 36·5 per cent. in 1891; and the number of women married at the same age period was 44·3 per cent. of the whole number married, as compared with 45·3 per cent. in 1892 and 45 per cent. in 1891.

The number of men who were married at the age period twenty-five to thirty was 32·7 per cent. of the whole number married; and the number of women married at this age period was 23·2 per cent., as compared with 32·6 per cent. in 1892 and 32·4 per cent. in 1891 for the men, and with 22·7 per cent. in 1892 and 22·6 per cent. in 1891 for the women.

Seven hundred and eighty-seven men and 273 women married after having attained the age of fifty years, 17 men and 1 woman were over seventy-five years of age at the time of marriage, and 4 men were married when over eighty years of age.

The following table presents the statistics of the persons married in 1893 who were under twenty years of age : —

TABLE VII.

AGES.	NUMBERS.	
	Males.	Females.
13 years, . . . . .	—	1
14 years, . . . . .	—	10
15 years, . . . . .	—	46
16 years, . . . . .	8	159
17 years, . . . . .	14	493
18 years, . . . . .	112	1,292
19 years, . . . . .	312	1,627
Totals, . . . . .	441	3,628

It appears that 18,843 bachelors married maids and 999 married widows (or divorced women), and that 1,937 widowers married maids and 1,035 widowers married widows (or divorced women).

The number of widowers (or divorced men) who were married in 1893 was 2,972, and the number of widows (or divorced women) who were married in that year was 2,034.

These figures include all persons who were married more than once, whether divorced by the courts, or death.

From Table VI. it appears that the percentage of first marriages in 1893 was 86.97 for men and 91.08 for women, which differs but little from the percentages in this respect for the years 1892 and 1891.

The following table presents the percentages of marriages for twenty years, with reference to the nativity of the groom and bride. By this table it appears that there was an increase in the percentage of the native born from 1874 to 1879, and then a decrease up to 1893. The percentages of the foreign born, with a few exceptions, varied inversely, as compared with the native born. In the class of marriages of persons of mixed parentage there has been an increase with considerable uniformity during the whole period.

TABLE VIII. — *Marriages according to Nativity. — Percentages for Twenty Years.*

YEARS.	Both Parties Native Born.	Both Parties Foreign Born.	Native-born Groom and Foreign-born Bride.	Foreign-born Groom and Native-born Bride.	Not stated.
1874, . . .	53·64	29·29	6·88	9·08	·15
1875, . . .	57·03	27·09	7·05	8·82	·01
1876, . . .	58·43	25·52	7·55	8·32	·18
1877, . . .	60·00	22·76	8·00	9·11	·13
1878, . . .	61·88	21·52	8·34	8·64	·12
1879, . . .	62·19	20·23	8·29	9·23	·06
1880, . . .	60·15	21·77	8·97	9·09	·02
1881, . . .	58·12	23·36	9·97	8·52	·03
1882, . . .	55·74	25·56	9·86	8·81	·03
1883, . . .	54·98	26·13	9·99	8·85	·05
1884, . . .	52·89	27·37	10·84	8·88	·02
1885, . . .	53·21	26·55	11·04	9·17	·03
1886, . . .	51·46	27·90	11·18	9·43	·02
1887, . . .	49·85	29·02	11·55	9·56	·02
1888, . . .	48·03	30·61	11·64	9·67	·04
1889, . . .	46·94	31·47	12·11	9·47	·01
1890, . . .	46·11	31·50	11·97	10·35	·01
1891, . . .	45·87	32·37	11·58	10·15	·04
1892, . . .	44·57	33·98	11·37	10·08	·00
1893, . . .	43·96	34·49	11·55	9·97	·03

## DIVORCES.

The causes for which divorce from the bonds of matrimony may be granted in Massachusetts are set forth in the Public Statutes. It appears that the statute causes for which divorces were granted in the year 1893 were as follows :—

1. Adultery.
2. Cruel and abusive treatment.
3. Desertion (for three consecutive years next prior to filing of the libel).
4. Extreme cruelty.
5. Imprisonment (sentence to hard labor for five years or more).
6. Impotency.
7. Intoxication (gross and confirmed habits).
8. Non-support (neglect to provide).
9. Nullity of marriage (marriage void because of violation of laws concerning marriage).

In the report for the year 1891 it was stated that “doubtless there were many divorces which might have been granted on the ground of adultery which were granted for other causes, in order that children and other relatives might be spared the disgrace of having the charge of adultery established against one of the parents.” To this statement might have been added that divorces sought on the ground of adultery are more liable to be contested than those sought on other grounds. The statement made in the former report was challenged; but, as it was made on the authority of several judges and of many members of the bar having extensive practice in the divorce courts, the editor still believes it to be correct.

It appears that in the year 1893 the whole number of divorces granted was 1,045, which is 255 more than the whole number granted in the year 1892, and 246 more than the number granted in 1891; and it further appears, by reference to former reports, that the total number of divorces granted in 1893 is larger by 399 than the average number granted in the twenty-year period 1874–1893.

*Causes.* — Of the whole number of divorces granted in 1893, 219, or 20·9 per cent., were granted on account of adultery. The percentage of divorces granted for this cause in 1892 was 21, in 1891 17·5, while for the twenty-year period 1874–1893 the average percentage was 22·6.

The percentage of divorces granted on the ground of desertion was, in 1893, 47·7 (total, 498). In 1892 the percentage of divorces granted for this cause was 47·6, and in 1891 it was 48·7, while for the twenty-year period referred to the percentage was 46·9.

The percentage of divorces granted on the ground of gross and confirmed habits of intoxication was, in 1893 (total, 140), 13·4. In the year 1892 the percentage for this cause was 13·1, and the average percentage for this cause in the past twenty years was 13·5.

The total number of divorces granted on the ground of extreme cruelty in 1893 was 26, a percentage of 2·5. In 1892 the percentage was 2·3 and in 1891 it was 4·8, while the average percentage for the years 1874–1893 was 5.

The total number of divorces granted in 1893 on the ground of cruel and abusive treatment was 134, a percentage of 12·8. In 1892 the percentage for this cause was 10·8 and in 1891 it was 11·8. The average percentage for the twenty-year period 1874–1893 was 9.

On the ground of non-support the number of divorces granted in 1893 was 16, a percentage of 1·5, as compared with 3·6 in 1892 and with 2·2 per cent. in the twenty-year period 1874–1893.

These ratios are, as compared with the annual average for twenty years (1874–1893): for adultery, 1·7 per cent. lower; for desertion, ·8 per cent. higher; for intoxication, ·1 per cent. lower; for extreme cruelty, 2·5 per cent. lower; for cruel and abusive treatment, 3·8 per cent. higher; and for non-support, ·7 per cent. lower.

Of the whole number of divorces granted, 720, or 68·9 per cent., were granted on the complaint of the wife, as compared with 68·8 per cent. in 1892, 69·5 per cent. in 1891, and 69·4 per cent. for the twenty-year period 1874–1893.

Of the divorces granted on the ground of adultery, 51·6 per cent. were granted to women in 1893, as compared with 48·2



per cent. in 1892 and 50·7 per cent. in each of the years 1891 and 1890.

Of the divorces granted on the ground of desertion, 61·6 per cent. were granted to women, as compared with 64·9 per cent. in 1892 and with 60·6 per cent. in 1891.

Of the divorces granted in 1893 on the ground of intoxication, 84·3 per cent. were granted to women, as compared with 79·8 per cent. in 1892 and with 85·3 per cent. in 1891.

All of the divorces but one granted on the ground of extreme cruelty were granted to women, and the same is true of those granted for cruel and abusive treatment.

The following table shows the relative rank of each county with reference to the prominent causes of divorce, as compared with the total number granted in each county for the year 1893 : —

TABLE IX.

ADULTERY.	DESERTION.	INTOXICATION.
Suffolk, . . . 25·2	Barnstable, . . . 80·0	Hampden, . . . 27·0
Middlesex, . . . 23·0	Franklin, . . . 60·0	Norfolk, . . . 23·3
Bristol, . . . 22·0	Hampshire, . . . 60·0	Worcester, . . . 16·7
Worcester, . . . 20·2	Norfolk, . . . 56·7	Bristol, . . . 16·2
Franklin, . . . 20·0	Essex, . . . 52·7	Middlesex, . . . 12·0
Essex, . . . 19·0	Middlesex, . . . 50·5	Plymouth, . . . 12·0
Hampden, . . . 18·9	Plymouth, . . . 50·0	Suffolk, . . . 11·3
Plymouth, . . . 15·5	Nantucket, . . . 50·0	Berkshire, . . . 10·3
Berkshire, . . . 15·4	Berkshire, . . . 48·7	Franklin, . . . 10·0
Hampshire, . . . 13·3	Suffolk, . . . 46·0	Essex, . . . 9·9
Barnstable, . . . 10·0	Worcester, . . . 44·7	Hampshire, . . . 6·6
Norfolk, . . . 6·7	Bristol, . . . 41·2	Barnstable, . . . —
Dukes, . . . —	Hampden, . . . 33·8	Dukes, . . . —
Nantucket, . . . —	Dukes, . . . —	Nantucket, . . . —
The State, . . . 20·9	The State, . . . 47·7	The State, . . . 13·4

The whole number of libels for divorce disposed of in 1893 was 1,350, of which 1,127, or 83·5 per cent., were not contested, as compared with 89·4 per cent. in 1892.

In 267 cases the libels were dismissed or discontinued, as compared with 141 in 1892 and 106 in 1891. In 38 cases the divorce was refused.

As compared with the number of marriages in the State, the number of divorces in 1893 was 1 to 21·8. In 1892 the ratio was 1 to 28·5 and in 1891 1 to 27·1, and for the twenty-year period ending with 1893 it was 1 to 27.

TABLE X. — *Ratio of Marriages to Divorces, by Counties, 1893.*

COUNTIES.	Number of Marriages.	Number of Divorces.	Ratio of Divorces to Marriages.
Barnstable, . . . . .	209	10	1 to 20·9
Berkshire, . . . . .	613	39	1 to 15·7
Bristol, . . . . .	2,089	68	1 to 30·7
Dukes, . . . . .	39	1	1 to 39
Essex, . . . . .	3,108	131	1 to 23·7
Franklin, . . . . .	335	10	1 to 33·5
Hampden, . . . . .	1,401	74	1 to 18·9
Hampshire, . . . . .	410	15	1 to 27·3
Middlesex, . . . . .	4,373	200	1 to 21·8
Nantucket, . . . . .	21	2	1 to 10·1
Norfolk, . . . . .	976	30	1 to 32·5
Plymouth, . . . . .	840	53	1 to 14·5
Suffolk, . . . . .	5,745	293	1 to 19·6
Worcester, . . . . .	2,655	114	1 to 23·3
The State, . . . . .	22,814	1,045	1 to 21·8

The highest ratio occurred in Nantucket County, 1 to 10·1, and the lowest in Dukes County, 1 to 39. Other counties having high ratios were: Plymouth, 1 to 14·5; and Berkshire, 1 to 15·7. Other counties having low ratios were: Franklin, 1 to 33·5; and Norfolk, 1 to 32·5.

It appears that the average length of married life of 1,347 libellants in 1893 was 11·56 years, as compared with 11·68 in 1892.

Of the suits entered upon the charge of adultery in 1893, the average length of married life was 10·68 years; for desertion it was 12·92 years; for intoxication, 12·11 years; for extreme cruelty, 10·05 years; for cruel and abusive treatment, 9·40 years; and for non-support, 8·55 years. The length of married life in one case of adultery and one of cruel and abusive treatment is not stated.

Eight divorces were granted to persons (7 women and 1 man) who had been married less than six months, and to 17 persons (11 women and 6 men) who had been married more than six months but less than a year, while 196 persons had been married over twenty years and 49 persons had been married over thirty years before seeking divorce.

TABLE XI. — Average Length of Married Life of Libellants, by Statute Causes Five Years, 1889-1893. (Expressed by Years, and Decimals of a Year.)

YEARS.	YEARS OF MARRIED LIFE.									
	Adultery.	Desertion.	Intoxica- tion.	Extreme Cruelty.	Cruel and Abusive Treatment.	Non- support.	Imprison- ment.	Impotency.	Nullity of Marriage.	Totals.
1889,. . . . .	10.39	11.30	11.25	9.75	11.04	11.76	-	8.00	4.50	10.99
1890,. . . . .	10.31	11.95	11.75	7.22	9.70	15.46	8.67	.50	10.14	11.27
1891,. . . . .	10.99	10.12	11.48	9.70	10.53	10.94	5.50	2.67	9.00	10.46
1892,. . . . .	10.65	13.06	12.06	10.15	9.19	8.09	11.75	7.00	8.09	11.68
1893,. . . . .	10.68	12.92	12.11	10.05	9.40	8.55	10.83	1.25	3.43	11.56
Average 5 years,	10.60	11.87	11.73	9.37	9.97	10.96	9.19	3.88	7.03	11.19

A review of the statistics of the five years 1889-1893, relative to the length of married life of libellants, shows that the number of suits entered during that period was 4,450, and the average length of married life in 4,439 cases (11 cases unknown) was 11·24 years.

From Table XI. it appears that the average length of married life of libellants for divorce for the different causes was as follows: for adultery, 10·60 years; for cruel and abusive treatment, 9·97 years; for desertion, 11·87 years; for extreme cruelty, 9·37 years; for imprisonment (four years), 9·19 years; for impotency, 3·88 years; for intoxication, 11·73 years; for non-support, 10·96 years; for nullity of marriage, 7·03 years.

Of the whole number of libellants the length of whose married life is stated, 17, or ·38 of 1 per cent., had been married less than six months; 26, or ·59 of 1 per cent., had been married from six months to a year; 629, or 14·2 per cent., had been married over twenty years; and 127, or 2·9 per cent., had been married over thirty years before seeking divorce.

TABLE XII. — Divorces Granted, by Years and Statute Causes. — Twenty Years.

THE STATE.

YEARS.	ADULTERY.			DESERTION.			INTOXICATION.			EXTREME CRUELTY.			CRUEL AND ABUSIVE TREATMENT.			NEGLECT TO PROVIDE.			IMPRISONMENT.			IMPOTENCY.			TOTALS.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
1874,	83	91	174	97	187	284	73	65	138	56	56	112	27	27	54	32	32	64	1	2	3	1	1	2	188	460	648
1875,	68	64	132	131	123	254	91	82	173	46	46	92	35	35	70	14	14	28	2	2	4	1	1	2	209	368	577
1876,	46	71	117	78	139	217	90	86	176	45	45	90	36	36	72	18	18	36	2	2	4	1	1	2	128	397	525
1877,	64	79	143	70	144	214	74	71	145	59	59	118	54	54	108	7	7	14	2	2	4	1	1	2	137	416	553
1878,	77	71	148	100	150	250	86	81	167	43	43	86	53	53	106	11	11	22	7	7	14	2	2	2	182	418	600
1879,	62	69	131	87	177	264	67	59	126	29	29	58	41	41	82	12	12	24	2	2	4	1	1	2	157	389	546
1880,	78	75	153	86	178	264	62	52	114	30	30	60	59	59	118	7	7	14	1	1	2	2	2	2	177	403	580
1881,	47	57	104	73	124	197	42	33	75	16	16	32	36	36	72	12	12	24	2	2	4	1	1	2	129	280	409
1882,	50	67	117	75	183	258	73	68	141	28	28	56	24	24	48	12	12	24	3	3	6	1	1	2	130	385	515
1883,	86	71	157	98	223	321	83	74	157	29	29	58	50	50	100	13	13	26	1	1	2	1	1	2	194	461	655
1884,	81	82	163	110	168	278	79	68	147	22	22	44	57	57	114	9	9	18	1	1	2	1	1	2	204	410	614
1885,	81	70	151	117	189	306	86	76	162	35	35	70	55	55	110	5	5	10	1	1	2	1	1	2	214	432	646
1886,	58	67	125	107	168	275	98	84	182	32	32	64	62	62	124	7	7	14	1	1	2	1	1	2	180	420	600
1887,	87	92	179	138	259	397	111	99	210	16	16	32	72	72	144	16	16	32	1	1	2	1	1	2	241	555	796
1888,	71	55	126	105	199	304	89	77	166	22	22	44	59	59	118	12	12	24	5	5	10	3	3	3	192	432	624
1889,	78	68	146	162	216	378	101	89	190	36	36	72	69	69	138	20	20	40	5	5	10	2	2	2	258	498	756
1890,	67	69	136	136	199	335	88	74	162	17	17	34	56	56	112	11	11	22	3	3	6	1	1	2	220	434	654
1891,	69	71	140	153	236	389	109	93	202	39	39	78	91	91	182	18	18	36	2	2	4	1	1	2	243	556	799
1892,	86	80	166	132	244	376	104	83	187	18	18	36	86	86	172	29	29	58	4	4	8	1	1	2	246	544	790
1893,	106	113	219	191	307	498	140	118	258	26	26	52	134	133	267	16	16	32	1	1	2	1	1	2	325	720	1,045
Totals,	1,445	1,482	2,927	2,246	3,813	6,059	1,746	1,532	3,278	638	644	1,282	1,139	1,160	2,299	281	281	562	3	58	61	6	16	22	3,954	8,978	12,932

\* One male, 3 females, nullity of marriage.      † Two males, 2 females, nullity of marriage.      ‡ Three males, 4 females, nullity of marriage.  
§ One male, 4 females, nullity of marriage.      || Three males, 3 females, nullity of marriage.      ¶ Three males, 3 females, nullity of marriage.

## DEATHS.

The number of deaths reported for the year 1893 was 49,084, which was 322 more than the number reported in 1892, and 3,899 more than the number reported in 1891. This number was also greater by 3,417 than the average mortality for five years ending with 1893. The death-rate for the year was 20·13 per 1,000 of the estimated living population (2,438,363), which is ·44 less than the rate of 1892. The mortality of infants under one year was 10,990, which was 341 greater than the number reported in 1892, and exceeded any previous year of registration. The percentage of deaths of children under one year of age to the total mortality was 22·39, as compared with 21·84 in 1892 and 22·54 in 1891.

It appears that the total mortality for 1893 was greater than that of 1892, and the mortality of every month except January, February and July was greater than the corresponding months in 1892. The greatest difference was in December, in which month there were 788 more deaths than there were in December, 1892, and the least difference (53) was in the month of June.

The greatest number of deaths occurred in August and the third quarter of the year, and the least in June and the fourth quarter. In the previous year the greatest number of deaths occurred in January. It appears that of the whole number of deaths reported for the month of August (4,934), over 33·5 per cent. was due to zymotic diseases.

During the twenty-two years 1872–1893 the quarterly mortality has been the largest in the first quarter of the year only thrice, — 1879, 1890, 1892.

*Sex.* — In 1893 the deaths of males exceeded those of females by 714; and notwithstanding the excess of females in the population, there has been an average yearly excess of 316 in the deaths of males during the five years 1889–1893. From 1873 until 1888 there had been no excess of mortality of males.

It appears also that in 1893 926 more males than females died under the age of one year, and the excess of the deaths

of males over those of the females under five years of age was 1,128.

Between the age period of five and thirty years there is a general increase in the deaths of females over the males, and from thirty to seventy years the deaths of males again predominate.

The percentage of the deaths of children under one year of age to the total mortality in 1893 (22·39) was greater than that of the preceding year, and also greater than the average of the twenty-year period 1874–1893. The percentage of deaths of children under five years of age was greater than that of 1892, but less than the average of the twenty years 1874–1893.

The percentage of deaths of persons between twenty and thirty years of age was less than that of 1892, and also less than the average for the twenty years 1874–1893. The percentage of deaths of all other ages was less than that of 1892, but greater than the average for the twenty years 1874–1893.

*Infant Mortality.* — The ratio of the deaths of infants under one year of age (22·39) to the total deaths was greater than that of the previous year, and also greater than the average for the twenty-year period 1874–1893. As compared with the number of births in 1893, the ratio was 16·35, which was greater than that of 1892 (16·17), and was also ·37 of 1 per cent. greater than the average of the twenty-year period.

In the following table are presented the names and other data relative to those persons who died in the year 1893, who are reported as having attained the age of one hundred years or more : —

*Aged One Hundred Years or More. — Died in 1893.*

Date.	NAME.	AGE.		Place of Birth.	Place of Death.	Whether Married.
		Yrs.	Mos.			
Jan. 30,	James Carroll, . . . . .	102		Ireland, . . . . .	Lawrence, . . . . .	Widower.
Feb. 8,	Sarah Braman (m. n. Balch), . . . . .	102	1	East Bradford, . . . . .	Georgetown, . . . . .	Widow.
April 3,	Aphia Turner, . . . . .	101	5	Scituate, . . . . .	Concord, . . . . .	Single.
April 9,	Ann Burke (m. n. Kirk), . . . . .	102	3	Ireland, . . . . .	Boston, . . . . .	Widow.
May 16,	Walter Haynes, . . . . .	103	6	Monson, . . . . .	Brimfield, . . . . .	Married.
May 29,	Robert McAdams, . . . . .	100		Ireland, . . . . .	Bridgewater, . . . . .	Widower.
June 16,	Marie Cloutier (m. n. Conlombe), . . . . .	103		Canada, . . . . .	Lawrence, . . . . .	Widow.
July 23,	Eliza Luther, . . . . .	100	10	Exeter, R. I., . . . . .	Berkley, . . . . .	Widow.
July 23,	Bridget Mullin, . . . . .	107	11	Ireland, . . . . .	Dracut, . . . . .	Married.
Sept. 12,	Hannah Day (m. n. Jones), . . . . .	100	10	Maine, . . . . .	Worcester, . . . . .	Widow.
Sept. 25,	Joseph Mellett, . . . . .	101	7	Canada, . . . . .	Northbridge, . . . . .	Widower.
Sept. 27,	Hannah Drake (m. n. Bisbee), . . . . .	100	6	Easton, . . . . .	Canton, . . . . .	Widow.
Oct. 2,	Margaret Welch (m. n. Hanley), . . . . .	103		Ireland, . . . . .	Boston, . . . . .	Widow.
Oct. 8,	Ann Hickey, . . . . .	104		Ireland, . . . . .	Great Barrington, . . . . .	Widow.
Nov. 15,	John Moncriff, . . . . .	101		Ireland, . . . . .	Framingham, . . . . .	Married.
Dec. 22,	Daniel Hagerty, . . . . .	103	11	Ireland, . . . . .	Salem, . . . . .	Widower.
Dec. 24,	Abijah Walden, . . . . .	100	10	Lynn, . . . . .	Lynn, . . . . .	Single.
Dec. 30,	Sarah W. Bullock, . . . . .	102	7	Guilford, Vt., . . . . .	Hanson, . . . . .	Widow.



It appears from previous records that during the past ten years (1884–1893) the total number of persons who died after having attained the age of one hundred years was 191.

The total number of those reported to have died between the age of one hundred and one hundred and one during the last ten years was 69; between one hundred and one and one hundred and two it was 35; between one hundred and two and one hundred and three it was 36; between one hundred and three and one hundred and four, 17; between one hundred and four and one hundred and five, 6; between one hundred and five and one hundred and six, 12; and 6 were reported to have lived beyond one hundred and ten years.

Of the whole number reported, 73·3 per cent. were females. Of the whole number, 61·2 per cent. were of foreign birth. Ninety-two and one-tenth per cent. of the whole had been married.

*Causes of Death.*—The number of deaths the causes of which were not registered in 1893 was 544, out of a total of 49,084. This number (544) comprises 109 deaths from “hemorrhage,” 105 from “tumor,” 17 from “inflammation,” and 311 deaths of which the cause was not stated in the returns, including 2 cases of “sudden and unspecified.”

The number (544) was 1·1 per cent. of the whole number registered, as compared with ·96 per cent. in 1892, ·90 per cent. in 1891 and 1·19 per cent. in 1890.

From 1871 to 1880 the average percentage of unspecified deaths was 3·21, and from 1881 to 1890 the percentage was 1·37. This diminishing percentage of the cases where there was a failure to return the cause of death indicates a more careful scrutiny on the part of the physician and an increasing accuracy of the records.

The following table contains the statistics of the causes of deaths, arranged in five general classes, for each of the fourteen counties, and the statistics of deaths where the cause was not specified, and also the respective percentages :—

TABLE XIII.  
Causes of Death, by Classes and Counties, 1893.

COUNTIES.	ZYMOTIC.		CONSTITUTIONAL.		DEVELOPMENTAL *		VIOLENT.		UNSPECIFIED.	
	Numbers.	Percentages.	Numbers.	Percentages.	Numbers.	Percentages.	Numbers.	Percentages.	Numbers.	Percentages.
THE STATE, . . . . .	8,739	17.80	9,387	19.12	4,732	9.64	2,214	4.51	544	1.11
Barnstable, . . . . .	59	9.97	109	18.41	73	12.83	61	10.30	8	1.35
Berkshire, . . . . .	304	20.20	245	16.27	121	8.04	75	4.99	18	1.20
Bristol, . . . . .	876	19.01	772	16.75	516	11.20	173	8.76	32	.69
Dukes, . . . . .	15	13.05	19	16.52	9	7.83	7	6.09	3	2.60
Essex, . . . . .	1,071	17.66	1,158	19.10	603	9.94	293	4.83	90	1.49
Franklin, . . . . .	92	14.07	116	17.74	82	12.54	38	5.81	12	1.83
Hampden, . . . . .	608	20.27	492	16.41	295	9.83	161	5.37	26	.87
Hampshire, . . . . .	191	18.42	186	17.94	129	12.44	87	3.57	21	2.02
Middlesex, . . . . .	1,652	17.54	1,889	20.05	856	9.08	361	3.83	123	1.31
Nantucket, . . . . .	1	1.14	18	20.45	18	20.45	2	2.27	1	1.14
Norfolk, . . . . .	347	15.13	488	21.27	220	9.59	93	4.05	22	.96
Plymouth, . . . . .	243	13.88	341	19.47	223	12.74	59	3.37	38	2.17
Suffolk, . . . . .	2,232	18.18	2,640	21.50	921	7.50	585	4.76	72	.59
Worcester, . . . . .	1,048	18.46	914	16.10	666	11.73	269	4.74	78	1.37

\* Still-births excluded.

Of the group of diseases known as zymotic or infectious the highest percentages were returned from Berkshire, Bristol and Worcester counties, and the lowest were returned from Plymouth, Dukes, Barnstable and Nantucket counties. The percentage of this class in the whole State, as compared with the total mortality, was 17·80, while the same percentage in 1892 was 18·97.

The decrease, comparing the statistics of 1893 with those of 1892, was found to exist in twelve of the fourteen counties, the most noted being Nantucket and Hampden. In the following counties there was an increase: Berkshire, ·33; and Middlesex, ·04.

In the group of constitutional diseases, Suffolk, Norfolk, Nantucket and Middlesex returned the highest percentages, and Worcester, Berkshire, Hampden and Dukes the lowest.

In the group of local diseases the highest percentages were from Nantucket and Dukes counties, and the lowest from Hampshire and Essex counties.

In the group of developmental diseases, Nantucket presented the highest percentage and Suffolk the lowest.

The following table presents the percentages of each class of diseases, as compared with the total number of deaths from causes, for a period of ten years for the State:—

TABLE XIV.

*Percentage of Causes of Death by Classes. — Ten Years.*

YEARS.	CLASSES.				
	Zymotic.	Constitu- tional.	Local.	Develop- mental.	Violent Deaths.
1884, . . . . .	21·1	23·8	39·7	10·9	4·5
1885, . . . . .	19·0	23·7	42·7	10·7	3·9
1886, . . . . .	18·5	24·2	42·0	11·0	4·2
1887, . . . . .	19·7	22·6	42·7	10·7	4·2
1888, . . . . .	19·1	21·8	43·7	10·2	4·0
1889, . . . . .	19·2	21·5	43·5	10·5	4·0
1890, . . . . .	18·6	21·2	44·8	10·1	4·2
1891, . . . . .	18·3	20·0	46·5	10·2	4·1
1892, . . . . .	18·9	19·1	46·9	9·8	4·3
1893, . . . . .	17·8	19·1	47·8	9·6	4·5

In the following table are presented the statistics of mortality from the principal zymotic or infectious diseases for the period of ten years (1884-1893) :—

TABLE XV.

YEARS.	DISEASES.									
	Dysentery.	Typhoid Fever.	Whooping- cough.	Croup.	Diphtheria.	Measles.	Scarlatina.	Cholera Infantum.	Small-pox.	Totals.
1884, . .	254	875	410	562	1,084	75	627	2,081	8	5,971
1885, . .	253	768	184	520	1,003	318	587	1,852	19	5,499
1886, . .	243	800	271	505	1,053	180	331	1,931	—	5,314
1887, . .	266	922	232	532	1,096	455	594	2,131	3	6,231
1888, . .	248	943	245	500	1,331	219	504	2,195	8	6,193
1889, . .	299	891	310	484	1,730	171	185	2,156	4	6,230
1890, . .	220	835	363	387	1,239	114	196	2,491	1	5,846
1891, . .	234	821	219	311	907	236	246	2,771	—	5,745
1892, . .	193	827	248	350	1,105	88	669	2,898	2	6,380
1893, . .	231	750	274	322	1,072	276	810	2,704	9	6,448
Average, .	244	843	276	447	1,162	213	475	2,321	5	5,986

By reference to the foregoing table it appears that the sum of these deaths in 1893 was 68 greater than the sum of those from the same causes in 1892, and also greater than the sum of the deaths from the same causes in any single year during the ten-year period.

The deaths from dysentery show an increase of 38 over the previous year, but 13 less than the average for ten years.

The mortality from typhoid fever was less than the preceding year, and less than any year since 1883.

The number of deaths from whooping-cough was 2 less than the average for the ten-year period.

The number of deaths from diphtheria was 1,072, which was 33 less deaths than in 1892, and 90 less deaths than the average for the decade.

The mortality from measles was higher than that in any year since 1887, and 63 higher than the average for the ten-year period.

The most striking increase is observed in the number of deaths from scarlatina (810), which is not only the highest

number of deaths for any single year of the decade, but the greatest since the year 1876.

The mortality from cholera infantum shows a falling off from the previous year, but 383 more than the average for the ten years before mentioned.

There were 9 deaths from small-pox, the highest number for any one year (with one exception) since 1882.

*Constitutional Diseases.* — There were 5,527 deaths registered from consumption in 1893, which was 11·26 per cent. to the total mortality, as compared with 11·76 per cent. in 1892 and 12·13 per cent. in 1891. It is gratifying to observe that the percentage to the total mortality in this most fatal disease has been steadily diminishing.

The deaths from cancer were 1,533, which was 3·1 per cent. to the total mortality, as compared with 2·87 per cent. in 1892.

*Local Diseases.* — It appears that in 1893 the number of deaths from apoplexy, insanity, paralysis and convulsions (diseases of the nervous system) was 4,020, which was 14 more than the number reported from the same causes in 1892, and 264 more than 1891. By comparing these with former reports, it will be observed that there has been an almost unbroken increase in this group of diseases for a period of eighteen years.

It is to be observed that in 1893 there were registered 883 deaths from convulsions, 1,210 from paralysis, 161 from dropsy, 25 from ascites and 91 deaths from jaundice, making an aggregate of 2,370 deaths. As these are chiefly symptoms of well-recognized diseases, a proper classification in the returns to the Secretary of the Commonwealth would undoubtedly show an annual decrease in deaths ascribed to these causes.

The number of deaths ascribed to insanity was 272, which was 19 more deaths than those of 1892, and the greatest reported in any year since 1861.

The number of deaths ascribed to causes classified as heart disease, etc., was 3,696, or 214 less than the number reported from these causes in 1892, 91 less than those of 1891, but 600 more than the average mortality from these diseases for the ten-year period 1884–1893.

The number of deaths from the principal diseases of the respiratory organs — pneumonia, pleurisy (including hydrothorax) and bronchitis — was 7,437, which was a larger number by 315 than that reported in 1892 from the same causes, and 1,327 larger than the number of 1891.

The deaths from bronchitis were 1,738, which was 148 less than the number from the same cause in 1892, but 80 more than those recorded for 1891.

From pleurisy (not including cases of hydrothorax) there were 197 deaths, which was 15 less deaths than those of 1892, and an increase of 87 deaths over 1891.

The deaths due to pneumonia in 1893 were 5,499, an excess of 479 deaths, as compared with those in 1892 from the same cause, and 1,162 greater than those of 1891.

From peritonitis there were 591 deaths, 27 more than the number for 1892, 74 more than those reported for 1891, and 152 more than the average for the ten years 1884–1893. Inasmuch as the primary cause of a number of deaths classified as peritonitis is appendicitis, it would seem proper that this disease should be classified under that head, thus reducing the number of deaths classified simply as peritonitis.

The number of deaths the causes of which are tabulated under kidney diseases, etc., was 1,685, which was 116 more than those of 1892, 189 more than those of 1891, and 375 more than the average for the decennial period. (This total includes 48 cases of death from disease of the prostate.)

*Developmental Causes.* — The number of deaths ascribed to teething was 50, or 15 less than the number from this cause in 1892, 17 less than those of 1891, and 46 less than the average for the decennial period.

The number of deaths of infants reported as due to causes incident to the time of birth was 3,570, or 148 more than the number from these causes in 1892, 434 more than those of 1891, and 706 more than the average for the ten-year period.

The rate of increase of deaths from this group of causes should be compared with the birth-rate of the population, which has increased with considerable uniformity from 25.45

per 1,000 in 1884 to 27·56 in 1893, an actual increase of 18,577 births.

The number of deaths registered as being due to old age was 1,861, a decrease of 34 deaths in comparison with those of 1892, 90 less deaths than those of 1891, and 68 less than the average for the decennial period.

The number of deaths from the causes incidental to childbirth was 235, as compared with 211 in 1892 and 180 in 1891. The average for the ten-year period was 169.

*Deaths from Violence.* — The total mortality from the principal causes due to violence, either homicidal, suicidal or accidental, was 1,319. The causes contributing to the mortality were: burns and scalds, poison, railway accidents, drowning, lost at sea, freezing, heat, lightning, homicide and suicide.

The entire mortality from violence was 2,214, of which 172 were due to accidental strangulation or suffocation, and 479 to various other forms of casualty.

The number of deaths of persons drowned or lost at sea was 400, 58 more deaths than the previous year, and the highest number since 1884.

During the year 1893 there were 6 deaths by lightning, 13 from heat. The further discussion of this class of deaths will be found in the observations on the medical examiners' returns.

*Most Prominent Causes of Death.* — Four of the most destructive causes of death are pulmonary consumption, pneumonia, heart disease and cholera infantum; and these, with very few exceptions, remain yearly in the same order of fatality.

At no former period (as shown by previous reports) have the deaths from pneumonia been so numerous as the present year, nor has its approach in total mortality been so close to pulmonary consumption, the difference being only 28 deaths in 1893.

A group of twelve prominent causes of death, including "kidney diseases," constitutes 60·61 per cent. of the total deaths in 1893, as compared with 60·97 per cent. in 1892, 61·77 per cent. in 1891, and 62·18 per cent. in 1890.

The other prominent causes of death in their relative order in 1893 were as follows : —

	Deaths.		Deaths.
13. Atrophy and debility, .	1,232	17. Convulsions, . . .	883
14. Tabes mesenterica, .	1,192	18. Scarlet-fever, . . .	810
15. Enteritis, . . .	1,096	19. Typhoid fever, . . .	750
16. Premature birth, . .	997	20. Peritonitis, . . .	591

*Small-pox.* — During the year 1893 there were 9 deaths from small-pox, 2 males and 7 females. Of those deaths, 4 occurred in Hampden County, 4 in Suffolk and 1 in Middlesex County. Two were under one year, 1 between five and ten years, 2 between fifteen and twenty years and 4 between twenty and thirty years.

There was 1 death in January, 2 deaths in February, 1 in March, 1 in June and 4 in December. This was the largest number of deaths (with one exception) since 1882, and formed .018 per cent. of the total mortality.

With the exception of the epidemic of 1872–1873, the highest ratio of deaths from small-pox to the total mortality from 1851 was 1.56 per cent. From 1873 the highest percentage to the total mortality was .019.

*Measles.* — The number of deaths recorded from measles in 1893 was 276, which was 188 more deaths than the preceding year, and the highest number since 1887. The deaths from this cause to 100 deaths from all causes was .56. In 1892 it was .18 of 1 per cent., and in 1891 it was .52 of 1 per cent.

Of the whole number of deaths from this cause, Worcester, Suffolk, Middlesex, Essex and Hampden counties report an aggregate of 210. The lowest number reported was from Dukes County, and no deaths were reported from Barnstable and Nantucket counties.

*Scarlet-fever.* — The number of deaths registered from this disease in 1893 was 810, which was 141 more than the number reported from the same cause in 1892, 564 more than that of 1891, 614 more than that of 1890, and the highest number of deaths in any year since 1879.



Since 1888 there has been a rapid increase in the number of deaths from this cause. There were no deaths reported in 1893 either from Dukes or Nantucket counties. Nearly one-third of the deaths is credited to Suffolk County, and following in order are Middlesex, Essex and Bristol, all aggregating 623 deaths. The largest number of the deaths were reported in January, February, March, April and May.

*Diphtheria and Croup.* — These two causes of death which are now generally accepted as identical, caused during the year 1893, 1,394 deaths. The number of deaths registered from the same combined causes in 1892 was 1,455 and 1,218 in 1891. The percentage of these two diseases to the total mortality was 2.84. With the exception of the year 1891 this was the lowest ratio since 1874.

Compared with the mortality from these two causes in 1892, there was an increase in Essex, Middlesex, Plymouth and Suffolk counties, and a decrease in all the rest except in Dukes, in which there was 1 death from croup in each year.

The mortality from croup had a less ratio to the total mortality than that of 1892, and the least ratio in any year of the past thirty. With the exception of 1891 the mortality from diphtheria was the lowest since 1874. The greatest mortality from diphtheria occurred in the age periods of five to ten, two to three and one to two; and the months which showed the largest number of deaths from this cause were January, October, November and December, while the least number was recorded in June.

The greatest mortality from croup was registered in the month of December, and the least in August.

*Typhoid Fever.* — The number of deaths registered from this disease in 1893 was 750 or 77 less deaths than the number registered from this cause in 1892 and 71 deaths less than in 1891. This is equal to 1.53 per cent. of the total mortality for the year; the lowest ratio since 1861.

The greatest mortality occurred at the age periods of fifteen to twenty, twenty to thirty, and thirty to forty. The aggregate of these periods makes 65.5 per cent. of the total deaths from this cause.

The greatest mortality occurred in the months of September, October and November, and the least in the month of March. By reference to former reports it will be seen that there is a generally uniform increase of deaths in the autumn months.

*Diarrhoeal Diseases.* — The mortality from this class of diseases, 4,667, was 55 less than the number from this same class in 1892, and 705 larger than the average number for the ten-year period 1884–1893.

*Dysentery.* — The total number of deaths registered from this cause in 1893 was 231, which was 38 more than the number registered in 1892, 3 deaths less than the number reported in 1891, and 13 less than the average number reported from this cause in the ten-year period 1884–1893. The greatest mortality was at the extremes of infancy and old age, and by comparison with former reports this same fact is observed for a period of thirty years.

*Cholera Infantum.* — The number of deaths recorded from this disease in 1893 was 2,704, which was 194 less than the number reported in 1892, and 383 greater than the average number for the decade 1884–1893. The highest number of deaths from this cause is reported from Middlesex County.

Of all deaths from this disease, 767 occurred in July, 1,108 in August and 520 in September, or 88·6 per cent. of the whole number as compared with 88·2 per cent. in 1892 and 84·5 in 1891.

*Consumption.* — The number of deaths registered from this disease in 1893 was 5,527, which was 212 less than the number registered in 1892, but 43 more than the number reported in 1891 from this cause.

The ratio of deaths from this cause to the total mortality was 11·26, as compared with 11·76 per cent. in 1892, and 12·13 per cent. in 1891. The ratio to the total mortality is less than the ten-year period 1884–1893. There was an increase in the mortality in four counties, Barnstable, Dukes, Middlesex and Norfolk, and a decrease in all the rest as compared with 1892.

The greatest number of deaths from consumption occurred in the months of March, April and May, and the least number in February. There were 273 more females than males died from this disease.

*Pneumonia.* — The total number of deaths registered from this cause in 1893 was 5,499, which was 479 more than the number reported in 1892. As compared with the total mortality, the number of deaths from pneumonia in 1893 was 11·2 per cent., as compared with 10·2 per cent. in 1892 and 9·6 per cent. in 1891. As compared with 1892, there was a decrease in the number of deaths in Barnstable, Berkshire, Essex, Franklin, Nantucket and Worcester counties, and an increase in all the rest. The greatest mortality from this cause was in the age periods fifty to sixty, sixty to seventy, seventy to eighty, and under one year, and the least in the age period four to five. More than double the amount of deaths occurred in the first six months than occurred in the last six months, and the ratio was still greater in 1892.

*Whooping-cough.* — The number of deaths from this disease in 1893 was 274, which was 26 more than the number reported from the same cause in 1892 and 55 more than 1891. This number is less by 2 than the average number of deaths from this disease in the decade ending 1893. Over 75 per cent. of the deaths reported from this cause occurred in Essex, Middlesex, Suffolk and Worcester counties. There were no deaths in Dukes and Nantucket counties nor in the previous year.

*Influenza.* — The total number of deaths from influenza in 1893 was 296, a notable decrease as compared with the year 1892 in which there were 967 deaths. The number of deaths registered in 1891 was 546 and in 1890 was 411. The aggregate number of deaths from this cause for nine years previous (1881–1889) was only 159. This unusual mortality from influenza always reached its climax in the month of December or January.

The largest number of deaths (94) occurred in December of the present year, or 32 per cent. of the whole number regis-

tered from this cause. Of the whole number of cases reported during the year, 41·2 per cent. were males and 58·8 per cent. were females. There were no deaths in Nantucket from this cause.

*Brain Diseases.* — The number of deaths from the group of diseases which includes apoplexy, paralysis, softening of the brain, insanity, cephalitis and other unspecified diseases of the brain in 1893 was 5,144, which was 108 more than the number registered from this group in 1892 and 433 greater than the number reported from these causes in 1891, and 766 greater than the average of the ten-year period 1884–1893. The combined number of deaths from apoplexy and paralysis is less than the number from the same two causes in 1892, but greater than the number in 1891.

*Cancer.* — There were 1,533 deaths registered from cancer in 1893, as compared with 1,402 in 1892 and 1,395 in 1891.

*Sex.* — Of the whole number of persons reported to have died of cancer in 1893, 1,031 or 67·2 were females. Ninety-three per cent. of all the deaths from this cause occurred between the ages of twenty and eighty years. There were only 11 deaths from cancer of persons under twenty years of age. As compared with 1892, there was a decrease in the number of deaths reported from cancer in Barnstable, Berkshire and Suffolk counties, and an increase in all the rest except in Dukes and Nantucket counties, in each of which the number of deaths was the same as in 1892.

*Disease of the Kidneys.* — The number of deaths from Bright's disease, nephritis and other kidney diseases, excluding diseases of the prostate, in 1893 was 1,637, 102 more deaths than from the same cause in 1892. As compared with the total mortality, this number was 33·3 per 1,000, as compared with 31·5 in 1892 and 32·6 in 1891.

*Sex.* — Of the whole number of deaths from kidney diseases in 1893, 912, or 55·7 per cent., were males, and 725, or 44·3 per cent., were females, as compared with 58·1 and 41·9 in 1892, and 52·6 per cent. and 47·4 per cent. in 1891.

*Alcoholism.* — The total mortality from delirium tremens and intoxication in Massachusetts in 1893 was 205, which was 12 more than that reported in 1892. The ratio from this cause to the total mortality per 1,000 was 4.2, the highest ratio in any one year since 1871. The average for the ten-year period was 3.4. Of the total mortality from alcoholism, 158 deaths were returned from the populous counties of Essex, Middlesex, Suffolk and Worcester.

*Sex.* — Of the whole number of persons reported to have died from this cause in 1893, 150, or 73.1 per cent., were males, and 55, or 26.9 per cent., were females.

*Old Age.* — The number of deaths reported in 1893 as ascribed to "old age" (which means that the cause of death was unknown) was 1,861, of which number 1,059, or 56.9 per cent., were females, and 802, or 43.1 per cent., were males. Of the whole number, all but 147 were over seventy years of age. The largest number of deaths reported under this head were in the months of January, March and December, and the least number in June.

*Heart Diseases.* — The total mortality reported from heart diseases in 1893 was 3,511, which was 222 less than the number reported from these diseases in 1892, and 81 less than the number reported in 1891. The percentage of the total mortality was 7.2 in 1893, as compared with 7.6 in 1892, and 7.9 in 1891. There were 45 more males than females died from this cause.

*Ages.* — There was a decrease in the number of deaths from heart disease as compared with 1892 both in the age period "under one year" and also in the total of all periods up to five to ten.

The age period from fifty to eighty years comprises 56.8 per cent. of the whole number of deaths from this cause.

*Cholera.* — The number of deaths registered from cholera is 93. These deaths are exclusively from cholera morbus, as there has been no case of Asiatic cholera in Massachusetts for a number of years.

*Malarial Fevers.* — The total number of deaths reported in 1893 as remittent fevers and ague was 86, of which 48 deaths, or 55·8 per cent., occurred in Essex, Hampden, Middlesex and Suffolk counties.

*Syphilis.* — The whole number of deaths reported from this cause in 1893 was 48, of which 34, or 70·8 per cent., occurred in Middlesex and Suffolk counties.

*Hydrophobia.* — There were 2 deaths reported from this cause in 1893, 1 in Franklin and 1 in Middlesex counties.

*Glanders.* — There was 1 death from this disease in Suffolk County in 1893.

*Anthrax or Malignant Pustule.* — There was 1 death reported from this cause in 1893. It occurred in Middlesex County.

### MEDICAL EXAMINERS' RETURNS.

Tables I. and II. have been prepared in compliance with the provisions of chapter 379 of the Acts of 1885, and contain the statistics of the work of the medical examiners throughout the State in the year 1893. These tables include all cases where the cause of death has been investigated by the medical examiner after notification that the death was supposed to have resulted from violence.

In the report for the year 1892 it was remarked "Examination of the returns in detail compels the conclusion that the general public, including the police and other authorities of the cities and towns, does not fully appreciate the intent of the statute providing for the action of the medical examiners, although the law has been in operation for, now, more than fifteen years."

A similar examination of the returns for the year 1893 compels the same conclusion, but it does not seem to the editor worth while to repeat the exploitation of the matter as published in the report for 1892. A careful examination of the statistics and especially of the following table (XVI.) which sets forth the relative proportion of views and autopsies in the different counties would seem to be sufficient.

It is apparent that there is a discrepancy between the statistics of violent deaths as furnished in the medical examiners' returns (especially those of homicide and suicide), and the returns from the registrars. The reason for this is sufficiently obvious and it is fair to assume that the returns of the medical examiners are the more accurate. The question of homicide, suicide or accident, is often not decided until after the certificate for purposes of interment has been furnished to the registrar. This is notably true of cases of hypothetical poisoning where the long process of chemical examination is necessary for an accurate determination of the facts.

From table XVI. it will be seen that, as in the years 1887 to 1892, the ratio of views to autopsies was highest in the counties having respectively the largest and smallest population, Suffolk and Nantucket in 1883, and the ratio for the whole State remained the same in 1893 as the average ratio in the previous six years.

TABLE XVI. — Views and Autopsies for Six Years, 1888-1893, arranged by Counties, with Ratio of Autopsies to Views for the Individual Counties and the Whole State.\*

COUNTIES.	1888.		1889.		1890.		1891.		1892.		TOTALS.		RATIO OF AUTOPSIES TO VIEWS.
	Views.	Autopsies.	Views.	Autopsies.	Views.	Autopsies.	Views.	Autopsies.	Views.	Autopsies.	Views.	Autopsies.	
Barnstable,	26	4	13	-	21	5	16	1	39	1	138	12	1 to 11.5
Berkshire,	64	8	51	4	67	9	55	7	67	6	384	40	1 to 9.6
Bristol,	139	6	132	8	155	9	167	20	264	41	1,121	123	1 to 9.1
Dukes,	8	-	4	-	2	-	4	-	3	0	26	1	1 to 26.0
Essex,	191	13	203	16	231	18	232	16	243	12	1,337	97	1 to 13.8
Franklin,	29	1	15	-	29	2	40	1	45	2	203	7	1 to 29.0
Hampden,	144	10	126	12	127	11	145	10	179	22	905	78	1 to 11.6
Hampshire,	34	1	24	4	27	1	39	2	36	2	193	15	1 to 12.8
Middlesex,	231	19	276	18	256	17	317	32	336	27	1,759	155	1 to 11.3
Nantucket,	3	1	2	-	2	-	-	-	2	0	11	3	1 to 3.7
Norfolk,	69	7	84	9	107	1	65	5	76	4	480	33	1 to 14.6
Plymouth,	50	5	39	4	41	2	44	7	47	4	275	30	1 to 9.1
Suffolk,	504	123	533	93	554	122	514	113	601	123	3,306	689	1 to 4.8
Worcester,	159	12	152	12	154	9	202	11	283	25	1,210	79	1 to 15.3
The State,	1,651	210	1,654	180	1,773	206	1,840	225	2,221	269	11,348	1,362	1 to 8.3

\* These figures, with the exception of the column of ratios, are taken from the tables furnished by the Secretary of the Commonwealth, which differ in some instances from those contained in the Summary Observations for the respective years.



The total number of deaths, the cause of which was investigated by the medical examiners in 1893, was 2,221. This number is greater by 12 than the number of such cases reported in 1892, and 554 greater than the average for the eight years 1885-1892.

Of the number of cases investigated, 1,678, or 75·6 per cent., were those of males, and 530, or 23·9 per cent., were those of females, while the sex of 13 was not specified. The comparative data in the matter of sex for the nine years 1885-1893 are as follows:—

TABLE XVII.

YEARS.	SEX.						Totals.
	Males.	Percentages.	Females.	Percentages.	Unspecified.	Percentages.	
1885, . . .	973	76·1	286	22·4	19	1·5	1,278
1886, . . .	1,027	74·5	319	23·2	32	2·3	1,378
1887, . . .	1,191	76·5	350	22·5	15	1·0	1,556
1888, . . .	1,261	76·4	373	22·6	17	1·0	1,651
1889, . . .	1,253	75·8	388	23·4	13	0·8	1,654
1890, . . .	1,303	73·5	449	25·3	21	1·2	1,773
1891, . . .	1,362	74·0	457	24·8	21	1·2	1,840
1892, . . .	1,642	74·3	559	25·3	8	0·4	2,209
1893, . . .	1,678	75·6	530	23·9	13	0·5	2,221
Totals, . . .	11,690	75·1	3,711	23·9	159	1·0	15,560

The number of deaths from homicide was 76, or 3·42 per cent. of the whole number investigated during the year 1893, as compared with 72, or 3·26 per cent., in 1892 and 1891, and 1·97 per cent. in 1890. Of the whole number, 6 were cases of infanticide, 13 were cases of abortion, 18 were homicides by fire-arms, 1 by stabbing, 4 by poison and 34 by other methods.

*Suicide.* — The number of deaths reported by the medical examiners as being from suicide was, in 1893, 290, or 13·06 per cent. of the whole number of cases investigated, as compared with 273, or 12·40 per cent., in 1892, and 187, or 10·16 per cent. in 1891.

This per cent., 13·06, is the highest per cent. of the total number of cases investigated in any year since the year 1885, when it was 14·17.

*Methods of Suicide.* — Of the whole number of suicides reported, 80 were committed by fire-arms, 26 by cutting the throat or stabbing, 40 by drowning, 55 by hanging, 66 by poison and 23 by other methods.

*Sex.* — Of the 290 deaths reported as suicides, 228, or 78·6 per cent., were males, and 62, or 21·4 per cent., were females, as compared with 77 and 23 per cent., respectively, in 1892, and 70·5 and 29·5 per cent., respectively, in 1891.

Five persons, 1 male and 4 females, committed suicide by leaping from a height, and 8 persons, 7 males and 1 female, by inhaling gas. Of the 66 cases of suicide by poison, the form of poison was in 18 cases opium and its compounds; 13 arsenic and its compounds, including “Paris green” and “rough on rats,” while in 35 cases the suicide was by other forms of poison.

Of 106 cases of suicide reported as by shooting, cutting throat, etc., all except 8 were males; of 40 cases of suicidal drowning, all but 11 were males; of 55 cases of suicidal hanging, 41 were males; and of 66 cases of suicidal poisoning, 46 were males.

The mortality from suicide in the different counties for the year 1893 presented the following order: —

Suffolk, . . . . .	92	Plymouth, . . . . .	11
Middlesex, . . . . .	46	Berkshire, . . . . .	9
Essex, . . . . .	32	Hampshire, . . . . .	8
Worcester, . . . . .	28	Franklin, . . . . .	7
Bristol, . . . . .	22	Barnstable, . . . . .	3
Hampden, . . . . .	19	Nantucket, . . . . .	—
Norfolk, . . . . .	13	Dukes, . . . . .	—

TABLE XVIII. — *Recapitulation.*

YEARS.	HOMICIDE.		SUICIDE.		ACCIDENT OR NEGLIGENCE.		NATURAL AND UNKNOWN CAUSES, INCLUDING ALCOHOLISM.		Totals.
	Numbers.	Percentages.	Numbers.	Percentages.	Numbers.	Percentages.	Numbers.	Percentages.	
1885, .	45	3·52	181	14·17	567	44·37	485	37·94	1,278
1886, .	47	3·41	157	11·39	678	49·20	496	36·00	1,378
1887, .	52	3·34	173	11·12	748	48·07	583	37·47	1,556
1888, .	52	3·15	190	11·51	785	47·55	624	37·79	1,651
1889, .	51	3·08	199	12·03	792	47·89	612	37·00	1,654
1890, .	35	1·97	196	11·05	862	48·62	680	38·36	1,773
1891, .	60	3·26	187	10·16	866	47·06	727	39·52	1,840
1892, .	72	3·26	273	12·40	974	44·07	890	40·27	2,209
1893, .	76	3·42	290	13·06	976	43·95	879	39·57	2,221
Totals,	490	3·15	1,846	11·86	7,248	46·58	5,976	38·41	15,560

The ratio of death by suicide to the total mortality for the year 1893 is 5·9 per thousand.

*Accident or Negligence.* — From accident or negligence there were reported, in 1893, 976 cases, or 43·95 per cent. of the whole number of cases investigated, as compared with 974 cases, or 44·07 per cent., in 1892; 866 cases, or 47·06 per cent., in 1891, and 862 cases, or 48·62 per cent., in 1890.

From all other causes, including alcoholism and various natural as well as unknown or ill-defined causes, usually of a sudden nature, there were reported 879 cases, or 39·58 per cent., as compared with 890 cases, or 40·27 per cent., in 1892.

Of the deaths from accident the principal causes were as follows : —

By railroad accident, . . .	349	By fire-arms, . . .	5
horse railroad, . . .	1	lightning, . . .	3
electric railroad, . . .	16	overlaying, . . .	28
other vehicles, . . .	43	other forms of asphyxia, .	18
drowning, . . .	247	elevators, . . .	16
falls, blows and falling		other machinery, . . .	11
bodies, . . .	112	poisons, . . .	11
burns, scalds, etc., . . .	36	poisonous gases, . . .	19
heat, cold, etc., . . .	18	horses, etc., . . .	10
burning buildings, . . .	14		

*Intemperance.* — As to how far the abuse of alcoholic stimulants was a factor in the deaths reported as having been the subjects for official examination by the medical examiners, the returns for 1893 lack, as did those of many previous years something in the way of completeness, and moreover the great lack of uniformity in the reports makes it a matter of considerable difficulty to arrive at an accurate estimate of the number of deaths resulting wholly or in part from intemperance; but from as careful a review as possible of the data furnished, it appears that there were during the year 1893, 217 deaths whose cause was investigated by the medical examiners for which intemperance was to a greater or less degree responsible. This number was forty less than the number reported as due to this cause in 1892, and was 9.77 per cent. of the whole number investigated.

Of this number, 11 were cases of homicide, 32 were cases of suicide, 58 were cases of accident and 116 were cases of alcoholism, acute or chronic, or of sudden death from cerebral œdema, or heart disease superinduced by abuse of liquor.

Several cases are reported of those who have committed suicide after having been “cured” at a Keeley Institute.

The number of suicides which are attributed to remote effects of influenza is much smaller than the number so reported in 1892, but is still noteworthy.

Since the quality of illuminating gas has been changed in many places, and its cheapness secured by its increased deadliness, there have been very many deaths caused by its inhalation; and with the publicity of these cases necessarily furnished by the public press the gas has become a frequent and popular means of suicide, as well as the cause of very many accidental deaths.

The following reports of cases returned by the medical examiners are selected from a large number worthy of special mention, whose publication as a whole would too largely increase the size of this volume.

### *1. Homicide by Blows on the Head.*

M. L. R., Boston, age 53. View 3.20 P.M., December 7. Autopsy 9.10 A.M., December 8. About 1 A.M., November 21,

while in bed in her room at 15 Indiana Street, R. was assaulted by a man who had entered for the purpose of robbery. He struck her head many blows with an iron bar taken from a fence behind the house. Her moans awakened her daughter, who saw the man as he ran through the entry. R. was stunned by the blows, and when she was admitted at the City Hospital at 3.30 A.M., November 21, soon after the assault, it was found that she had received a compound, comminuted fracture of the left parietal bone. Dr. C. trephined and removed the broken fragments. There were five contused scalp wounds, which did not break the skull, besides the wounds over the comminution. There was some improvement after a few days but no full recovery of mental soundness. About November 30 gradual failure of strength was plain, and she died at 1.10 P.M., December 7, without the development of active symptoms.

*Autopsy.* — Partially cicatrized scalp wounds. Very little repair over or about parietal fracture; perforation of the bone here  $1\frac{1}{4}$  inches by  $\frac{3}{4}$  inch. Fissures in the bone extended forward 4 inches into temporal fossa, and upward and downward in irregular course without depression. Dura and pia inflamed and thickened under and around the parietal; bloody extravasation within the dura. Yellow softening of cortex 3 inches by 3 inches under the fracture. Vessels of pia and brain substance injected; brain wet; excess of fluid in lateral ventricles. Body much emaciated. Fistulæ around anus; one deep, exposing a carious coccyx. Apex of left lung indurated. In apex of right lung two quiescent cavities; many isolated nodules of small size in both lungs, no active inflammation, but a slowly progressive phthisis. Other organs not noteworthy, except the right kidney, which was atrophied to the size of a small lemon and showed no renal elements.

This return illustrates not so much anything of especial pathological value, but does show the kind of a report expected of medical examiners. It is free from all non-essentials and yet is a complete report of what was learned by personal inquiry and view and what was shown at autopsy. It is not concerned with what the views of the judge were at the inquest nor with what the jury determined at the trial if there ever was one. It is strictly confined to the medical examiner's duty.

2. *Case of Suicide under Circumstances Similar to Several others reported for 1893.*

A. S., Everett, age 40. Autopsy July 13, 10 A.M. Chloral poisoning. Dr. S. became depressed and went away to a Keeley cure. He came home and was apparently all right, but that night took an enormous dose of chloral hydrate and was found dead in the morning. The autopsy showed intense cerebral congestion and a fluid condition of the blood. Chemist found large quantities of chloral.

3. *Apropos of the Medical Registration Law.*

N. C., Malden, age 38. View August 19, 4 P.M. Hemorrhage from the lungs. Was "cured" of consumption by "Dr." C. Bled to death on the railroad platform. Two persons came out on the train as he lay there to see him about his "cure," having been sent by C.

4. *Fracture of Skull from Unknown Cause.*

J. D. K., Waterbury, age 44. View and autopsy at same time, 10.15 A.M., May 20.

Found on street in stupid condition. Money and valuables on person. Taken to station and on following morning to the hospital. Slight discoloration and swelling behind right ear, also slight facial paralysis. Died ten days later without having regained consciousness. Incision was made behind right ear showing extensive fracture of base without displacement. Autopsy showed middle fossa filled with extravasated blood and fracture of skull running from near convexity across right lateral sinus to foramen magnum. Divergent fracture from this to occipital bone. Laceration of left inferior lobe of cerebrum with clots of blood adherent. Old pleurisy. Edema of lungs, heart, liver, spleen and other organs normal.

This case shows the desirability of frequent autopsies.

The fatal injury in this case could either have been accidental or homicidal. The determination of the question in such case lies with the police department and not with the medical examiner. Should the investigation by the police disclose evi-

dences of assault that would render the case one of homicide, the State is prepared to go to trial without the loss of any of the perishable medical evidence and is not left to rely on mere opinion based on symptoms, as it would be obliged to if the case had been dismissed as one of probable fracture of skull from accidental fall and no autopsy been held. The medical examiner is not always in the position to know, or foresee, what may eventually be disclosed in a given case and ought to protect the State and himself by autopsy in such cases.

STATISTICAL NOSOLOGY.

ADOPTED FOR REGISTRATION IN MASSACHUSETTS.

The following plan of a Nomenclature and Classification of Diseases does not essentially differ from that authorized by the Registrar-General of England to be used in the preparation of the "Weekly Return of Births and Deaths in London," and is also, with slight modifications, identical with that embodied in a report drawn up by William Farr, Esq., M.D., of London, for the consideration of the International Statistical Congress which met at Paris in September, 1855; which report was printed in the Appendix to the Sixteenth Registration Report of the Registrar-General, England.

NOTE.—This page and those that follow contain two lists of causes of death. The first—that on the left side—may be called the **TABULAR LIST**, and comprises all the heads which it is proposed to admit into the complete tables, and under which ALL deaths, from whatever cause, are finally distributed. It represents those diseases which, under the same terms, or terms strictly synonymous with them, are found in practice to occur most frequently.

THE **SUPPLEMENTAL LIST** is *subordinate* to the first, and contains the principal *special* diseases which it may be considered desirable to note. The figures in this list indicate the corresponding numbers of the tabular list under which such diseases are ultimately arranged.

CAUSES OF DEATH.

TABULAR LIST.	SUPPLEMENTAL LIST.
CLASS I.—ZYMOTIC DISEASES.	<i>Of Diseases of Special Character, or rarely fatal.</i>
ORDER 1.— <i>Miasmatic.</i>	
I. 1.—1. Small-pox . . . . .	I. 1.—1. Vaccination not stated.
2. Measles . . . . .	Small-pox (second attack).
3. Scarlatina . . . . .	After vaccination.
4. Diphtheria . . . . .	Erysipelas, &c., after vaccination.
5. Cerebro-spinal Meningitis . . . . .	Chicken-pox.
6. Quinsy . . . . .	Miliaria.
7. Croup . . . . .	3. Angina maligna.
8. Whooping Cough . . . . .	5. "Spotted fever."
	6. Mumps.
	Tonadillitis.
	9. Typhus fever.
9. Typhoid (and Infantile Fever) . . . . .	10. Pyemia.
10. Erysipelas . . . . .	Hospital gangrene.
11. Metris (Puerperal Fever) . . . . .	Erythema.
	11. Childbed fever.



## CAUSES OF DEATH — (CONTINUED).

TABULAR LIST.	SUPPLEMENTAL LIST.
CLASS I. — (CONTINUED.)	
ORDER 1. — <i>Miasmatic.</i>	
I. 1. — 12. Carbuncle . . . . . 13. Influenza . . . . . 14. Dysentery . . . . . 15. Diarrhoea . . . . . 16. Cholera Infantum . . . . . 17. Cholera . . . . .  18. Ague . . . . . 19. Remittent Fever . . . . . 20. Rheumatism . . . . .	12. Anthrax. 13. Intermittent fever.      19. Yellow fever. 20. Rheumatism, with pericarditis, or disease of heart.
ORDER 2. — <i>Enthetic.</i>	
I. 2. — 1. Syphilis . . . . . 2. Stricture of Urethra . . . . . 3. Hydrophobia . . . . . 4. Glanders . . . . . 5. Malignant Pustule . . . . . 6. Septicæmia . . . . .	I. 2. — 1. Gonorrhœa. Purulent ophthalmia. 6. Necrosis (usually from dissection wounds).
ORDER 3. — <i>Dietic.</i>	
I. 3. — 1. Privation . . . . . 2. Purpura and Scurvy . . . . . 3. Delirium Tremens, } (Alcoholism) 4. Intemperance, }	I. 3. — 1. Want of breast milk. 2. Rickets. Bronchocele.
ORDER 4. — <i>Parasitic.</i>	
I. 4. — 1. Thrush . . . . . 2. Worms, &c. . . . .	I. 4. — 2. Porrigo. Scabies. Tape worm. Hydatids. Trichiniasis.
CLASS II. — CONSTITUTIONAL DISEASES.	
ORDER 1. — <i>Diathetic.</i>	
II. 1. — 1. Gout . . . . . 2. Dropsy . . . . . 3. Anæmia . . . . . 4. Cancer . . . . . 5. Noma (Canker) . . . . . 6. Mortification . . . . .	II. 1. — 3. Leucocythæmia. 4. Soft cancer. Epithelioma. Sweeps' cancer. Melanosis. Other kinds of cancer. Polypus (part not stated). Lupus. 6. Bed-sore.
ORDER 2. — <i>Tubercular.</i>	
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CLASS III. — LOCAL DISEASES.	
ORDER 1. — <i>Nervous System.</i>	
III. 1. — 1. Cephalitis . . . . . 2. Apoplexy . . . . . 3. Paralysis . . . . . 4. Insanity . . . . . 5. Chorea . . . . . 6. Epilepsy . . . . . 7. Tetanus . . . . . 8. Convulsions . . . . . 9. <i>Brain Diseases,* &amp;c.</i> . . . . .	III. 1. — 1. Phrenitis. Myelitis. 4. Monomania. Fright. Grief. Melancholia. Rage. 6. Hysteria. 8. Laryngismus stridulus. 9. Neuralgia. Ophthalmia. Otitis. Dis. of spinal nerve. Necrencephalus (Ramollissement).

\* Other diseases of the brain, or diseases of the nervous system, not otherwise distinguished, are referred to this head. *Mutatis mutandis*, the note applies to the corresponding heads in other orders of this class.

## CAUSES OF DEATH — (CONTINUED).

TABULAR LIST.	SUPPLEMENTAL LIST.
CLASS III. — (CONTINUED.)	
ORDER 2. — <i>Organs of Circulation.</i>	
III. 2. — 1. Pericarditis* . . . . . 2. Aneurism . . . . . 3. <i>Heart Diseases, &amp;c.</i> . . . . .	III. 2. — 1. Carditis. Endocarditis. 2. Hypertrophia. Angina pectoris Syncope. Arteritis. Phlebitis. Hydropericardium.
ORDER 3. — <i>Respiratory Organs.</i>	
III. 3. — 1. Epistaxis . . . . . 2. Laryngitis . . . . . 3. Bronchitis . . . . . 4. Pleurisy . . . . . 5. Pneumonia . . . . . 6. Asthma . . . . . 7. <i>Lung Diseases, &amp;c.</i>	III. 3. — 2. Oedema glottidis. 4. Empyema. Hydrothorax. Diaphragmitis. Pneumothorax. 5. Pulmonary apoplexy. 6. Grinders' asthma. Miners' asthma. Emphysema.
ORDER 4. — <i>Digestive Organs.</i>	
III. 4. — 1. Gastritis . . . . . 2. Enteritis . . . . . 3. Peritonitis . . . . . 4. Ascites . . . . . 5. Ulceration of Intestines . . . . . 6. Hernia . . . . . 7. Ileus . . . . . 8. Intussusception . . . . . 9. Stricture of Intestines . . . . . 10. Fistula . . . . . 11. <i>Stomach Disease, &amp;c.</i> . . . . . 12. <i>Pancreas Diseases, &amp;c.</i> . . . . . 13. Hepatitis . . . . . 14. Jaundice . . . . . 15. <i>Liver Disease, &amp;c.</i> . . . . . 16. <i>Spleen Disease, &amp;c.</i> . . . . .	III. 4. — 1. Glossitis. Stomatitis. Pharyngitis. Oesophagitis. 5. Perforation of — 6. Congenital. Femoral. Inguinal. Scrotal. Umbilical. Ventral. 7. Constipation. 9. Strict. oesophagus. 11. Dyspepsia. Pyrosis. Gastralgia. Hæmatemesis. Melaena. Hæmorrhoids. 14. Gall-stones. 15. Cirrhosis.
ORDER 5. — <i>Urinary Organs.</i>	
III. 5. — 1. Nephritis (Bright's Dis., &c.) . . . . . 2. Ischuria . . . . . 3. Diabetes . . . . . 4. Calculus (Gravel, &c.) . . . . . 5. Cystitis . . . . . 6. <i>Kidney Disease, &amp;c.</i> . . . . .	III. 5. — 1. Albuminuria. 5. Cystirrhœa. 6. Diuresis. Hæmaturia. Dis. of prostate. Dis. of bladder.
ORDER 6. — <i>Generative Organs.</i>	
III. 6. — 1. Ovarian Dropsy . . . . . 2. <i>Disease of Uterus, &amp;c.</i> . . . . .	III. 6. — 1. Ovarian tumor. 2. Hysteritis, Metritis (inflammation of womb) Uterine tumor, Polypus uteri. Orchitis. Hydrocele.

\* [See also I. 1. — 20.]

## CAUSES OF DEATH — (CONTINUED).

TABULAR LIST.	SUPPLEMENTAL LIST.
<p style="text-align: center;">CLASS III. — (CONTINUED.)</p> <p style="text-align: center;">ORDER 7. — <i>Organs of Locomotion.</i></p> <p>III. 7. — 1. Arthritis . . . . .</p> <p style="padding-left: 40px;">2. Joint Disease, &amp;c. . . . .</p> <p style="text-align: center;">ORDER 8. — <i>Integumentary System.</i></p> <p>III. 8. — 1. Phlegmon . . . . .</p> <p style="padding-left: 40px;">2. Ulcer . . . . .</p> <p style="padding-left: 40px;">3. Skin Diseases, &amp;c. . . . .</p>	<p>III. 7. — 1. Ostitis. Periostitis.</p> <p style="padding-left: 20px;">2. Fragilitas ossium. Mollities ossium. Caries. Necrosis. Exostosis. Hip disease. Spine disease.</p> <p>III. 8. — 1. Abscess (part not stated) Boil. Whitlow.</p> <p style="padding-left: 20px;">3. Roseola. Urticaria. Eczema. Herpes. Pemphigus. Ecthyma. Impetigo. Psoriasis, &amp;c.</p>
<p style="text-align: center;">CLASS IV. — DEVELOPMENTAL DISEASES.</p> <p style="text-align: center;">ORDER 1. — <i>Developmental Diseases of Children.</i></p> <p>IV. 1. — 1. Still-born . . . . .</p> <p style="padding-left: 40px;">2. Premature Birth, and Infantile Debility . . . . .</p> <p style="padding-left: 40px;">3. Cyanosis . . . . .</p> <p style="padding-left: 40px;">4. Spina Bifida . . . . .</p> <p style="padding-left: 40px;">5. Other Malformations . . . . .</p> <p style="padding-left: 40px;">6. Teething . . . . .</p> <p style="text-align: center;">ORDER 2. — <i>Developmental Diseases of Women.</i></p> <p>IV. 2. — 1. Paramenia . . . . .</p> <p style="padding-left: 40px;">2. Childbirth. (See Metria I. 1.—9.)</p> <p style="text-align: center;">ORDER 3. — <i>Developmental Diseases of Old People.</i></p> <p>IV. 3. — 1. Old Age . . . . .</p> <p style="text-align: center;">ORDER 4. — <i>Diseases of Nutrition.</i></p> <p>IV. 4. — 1. Atrophy and Debility . . . . .</p>	<p>IV. 1. — 2. Atelectasis. 5. Anus imperforatus. Cleft palate. Idiocy.</p> <p>IV. 2. — 1. Chlorosis. Olmacteria. Menorrhagia.</p> <p style="padding-left: 20px;">2. Miscarriage. Abortion. Puerperal mania. Puerperal convulsions. Phlegmasia dolens. Caesarian operation. Extra-uterine foetation. Flooding. Retention of placenta. Presentation of placenta. Deformed pelvis. Breast abscess.</p>

## CAUSES OF DEATH — (CONCLUDED).

TABULAR LIST.	SUPPLEMENTAL LIST.
<b>CLASS V. — VIOLENT DEATHS.</b>	
<b>ORDER 1. — <i>Accident or Negligence.</i></b>	
<b>V. 1. — 1. Fractures and Contusions . . . . .</b> <b>2. Wounds . . . . .</b> <b>3. Burns and Scalds . . . . .</b> <b>4. Poison . . . . .</b> <b>5. Drowning . . . . .</b> <b>6. Suffocation . . . . .</b> <b>7. Otherwise * . . . .</b> <b>8. "Casualty" † . . . .</b>	<b>V. I. — 1. Railroad accidents.</b> <b>5. Lost at sea.</b> <b>6. Asphyxia.</b> <b>Strangulation.</b> <b>7. Exposure.</b> <b>Cold water.</b> <b>Frozen.</b> <b>Heat.</b> <b>Lightning.</b> <b>Surgical operation.</b>
<b>ORDER 2. — <i>Battle.</i></b>	
<b>ORDER 3. — <i>Homicide.</i></b>	
<b>ORDER 4. — <i>Suicide.</i></b>	
<b>V. 4. — 1. Wounds . . . . .</b> <b>2. Poison . . . . .</b> <b>3. Drowning . . . . .</b> <b>4. Hanging . . . . .</b> <b>5. Otherwise . . . . .</b>	
<b>ORDER 5. — <i>Execution.</i></b>	
<b>V. 5. — 1. Hanging . . . . .</b>	
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**NOTE.**—Cases of "infantile fever" are classed with typhoid, relapsing and other continued fevers, under one name, "typhoid fever;" of "rheumatic fever," with "rheumatism;" of "hemorrhage," and "abscess," with the diseases of the part affected (if that is stated, as it should always be, in the return). As "stricture of the urethra" is almost invariably the result of gonorrhoea, it is classed as I. 2.—2. All cases of death returned "unknown," or of which the cause is not stated, and cases of "tumor," "inflammation," or "hemorrhage," of which the locality or part affected is not mentioned, are classed as unknown, and therefore not included in the foregoing table of specified causes.

\* Manner stated.

† Manner not stated; return therefore imperfect.







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**OF THE**

**BUREAU OF STATISTICS OF LABOR.**

**MARCH, 1894.**

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# Commonwealth of Massachusetts.

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BUREAU OF STATISTICS OF LABOR.  
CLAPLIN BUILDING, 20 BEACON STREET,  
BOSTON, October 15, 1894.

TO THE HONORABLE SENATE AND HOUSE OF REPRESENTATIVES:

I have the honor to transmit, herewith, the Twenty-fourth Annual Report of the Bureau of Statistics of Labor.

This report consists of two parts, the first devoted to the evil of enforced idleness due to lack of employment, a subject which at present leads in importance all other topics relating to the labor question, and the second containing a chronological record of the principal events connected with organized labor in Massachusetts during the year. The summary of labor legislation usually included in an introduction to the report, will now be found in Part II.

In transmitting this report, I wish to record my appreciation of the constant assistance and co-operation of Mr. Charles F. Pidgin, the experienced First Clerk of the Bureau; and to thank Mr. Frank H. Drown, Second Clerk, and the members of the clerical force generally. To their faithfulness, industry, and zeal the successful prosecution of the work of the Bureau is largely due.

Very respectfully,

HORACE G. WADLIN, *Chief.*



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PART I.

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UNEMPLOYMENT.

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## PART I.

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# UNEMPLOYMENT.

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The extreme business depression which has continued during the past year, and affected all parts of the country, has brought various schemes in aid of the unemployed forcibly to the attention of every industrial community. Information respecting methods of relieving the hardship due to lack of work and of dealing with the unemployed has been eagerly sought, and the lack of definite knowledge as to the best method of procedure in such exigencies has led to the adoption of plans more or less tentative and experimental. Similar problems, although hardly yet seriously considered in this country, have long been studied abroad. The purpose of the present report is to present a condensed statement of such leading historical examples as are recorded, and a summary of such plans as have either been put into practical operation or have been suggested, in other countries as well as in our own, for dealing with the question, supplemented by statistical information as to the extent of unemployment in Massachusetts under normal conditions, and as to the results of the relief work undertaken in the city of Boston, and its immediate vicinity, during the past winter.

As to the foreign data, reliance has been placed upon official documents in the possession of the Bureau. Especial acknowledgment is due to the very full and lucid report upon "Agencies and Methods for Dealing with the Unemployed," issued by the Labor Department of the English Board of Trade, under the immediate supervision of Mr. H. Llewellyn Smith, Commissioner of Labor. This document, issued September 18, 1893, contains a most complete and valuable condensation of

English and foreign matter relating to the subject, the salient points of which have been reproduced herein. A report, issued by the Office du Travail of France, on "Le Placement des Employés," has also been of service, and various other documents, including the Report of the Bureau of Industries in New Zealand, have been freely quoted. In most cases, references for quoted matter have not been embodied in the text, and this general acknowledgment is therefore made.

The report, in its arrangement, presents, first, abstracts of the leading historical examples of public aid to the unemployed. This section is followed by accounts of modern plans for dealing with the unemployed; and, finally, current statistical matter and a statement of local conditions are presented. A summary of conclusions completes the report, and to this summary especial attention is directed.

## LEADING HISTORICAL EXAMPLES OF PUBLIC AID TO THE UNEMPLOYED.

### FRANCE.

#### *National Workshops.*

The following account of the most extensive attempt to provide employment in works conducted on the part of the state by the French Provisional Government after the Revolution of 1848 is mainly derived from the work of M. Émile Thomas, entitled "Histoire des Ateliers Nationaux," published in 1848, through the abstract of the same contained in the report on "Agencies and Methods for Dealing with the Unemployed" issued by the English Labor Department. The report says:

"The violent and sudden crisis of the Revolution of February, 1848, naturally disturbed the course of industry in Paris. There was a commercial panic, and large numbers of workpeople were thrown out of work. Thus the prevailing want of employment was one of the first questions with which the Provisional Government, established on February 24th, 1848, found itself face to face. On February 25th, on the proposal of Louis Blanc, and on the demand of a deputation claiming to represent the people, the Provisional Government passed a decree from which the following is an extract:

The Provisional Government of the French Republic undertakes to guarantee the existence of the workmen by work. It undertakes to guarantee work for every citizen.

“For the purpose of carrying out this decree, Louis Blanc advocated the formation of a Ministry of Labor, but this was negatived on the ground that a mere provisional Government could not thus anticipate the decision of the future assembly. In place of it, as a compromise, a Government Labor Commission, under the presidency of Louis Blanc, was established by a decree of February 28th, with power of inquiry and consultation only. The Commission met at the Luxembourg. Meanwhile the carrying out of the decree of February 25th, by the establishment of national workshops, was confided not to this Commission but to the Minister of Public Works, M. Marie, by the following decree of February 26th :

The Provisional Government decrees the immediate establishment of national workshops. The Minister of Public Works is entrusted with the execution of the present decree :

“Émile Thomas (who subsequently acted as director of the national works) thus describes their arrangement and difficulties in their earliest stages :

Admission to these various works was obtained in the following manner :

The workman first of all obtained a certificate from the landlord of his house, or furnished apartments, showing his address, whether in Paris or the department of Seine.

This certificate was visaed and stamped by the police commissary of the district. The workman then repaired to the office of the maire of his ward, and, on delivering this document, received in exchange a note of admission to the national works, bearing his name, residence, and calling, and enabling him to be received by the director of the workplaces in which vacancies existed.

All went well while the number of the unemployed was less than 6,000, but as soon as that number was exceeded the workmen of each arrondissement, after having visited all the open works in succession without result, returned to their maire's offices tired, starving, and discontented.

The workmen had been promised bread when work was not to be had, which was reasonable and charitable; the great mistake was,

however, then committed of giving them money, and distributing it in public at the offices of the maires instead of distributing assistance in kind, which might have been done so easily through the agency of the bureaux de bienfaisance.

Each maire's office was authorized to pay every unemployed workman 1.50 frs. per day on production of a ticket showing that there was no vacancy for him in the national works.

The fixed sum of 2 francs was paid to any workman engaged on the public excavation works, without regard to his age, the work done, or his calling. . . . The workman made the following simple calculation, and he made it aloud: 'The State gives me 30 sous for doing nothing, it pays me 40 sous when I work, so I need only work to the extent of 10 sous.' This was logical.

The works opened by the Minister of Public Works being far distant from each other, and the workmen not being able to visit them all in turn to make certain that there were no vacancies for them, two central bureaux were established, one at the Halle-aux-Veaux under M. Wissocq, the other near the maire's office in the 5th arrondissement in the Rue de Bondy, entrusted to M. Higonnet. . . . The workmen went to have their tickets examined at one of these bureaux; and the absence of employment having been proved, they returned to get their 30 sous at their maires' offices.

"As the numbers claiming work or relief rapidly increased the whole organization got rapidly out of hand, and both the bureaux and the maire's offices became the centres of tumultuous crowds, which those in charge were quite unable to satisfy or keep in order. On March 6th, therefore, Émile Thomas, a chemist connected with the École Centrale, was commissioned by M. Marie to reorganize the works on a semi-military plan, in which he was aided by some of the senior pupils of the École Centrale.

"The workmen were divided into companies, each of which, when the organization was fully developed, contained 900 men. Each company was divided into four lieutenancies, each containing 224 men and a lieutenant, and each lieutenancy into four brigades, each with 55 men and a brigadier. Finally each brigade was divided into five squads with ten men and a chief of squad, all belonging to the same arrondissement. The brigadiers and chiefs of squads were elected by the men whom they had to control. This complicated organization was not fully developed during the first month.

“On March 5th, when Émile Thomas took the work in hand, the number of unemployed in Paris was estimated at from 13,000 to 14,000, in addition to 4,000 or 5,000 already engaged on public works. This number continued steadily to increase day by day, without, however, any corresponding expansion of the public works. The engineer officers were directed by the Government to suggest plans for new works, but they appeared unable or unwilling to do so, and day after day slipped by, the director having to exercise all his ingenuity to provide some means of occupying the idle masses of men who had been enrolled, and who were (each) drawing 30 sous a day from the State.

“On March 15th, after a meeting of the chief engineers, who were still unable to suggest means of employing usefully more than a few hundred of the 14,000 unemployed men, it was resolved to undertake a series of works in the plain of Monceaux, which, if serving no other object, would at least have the advantage of keeping the crowd employed. Already the whole scheme was costing 20,000 francs a day, and measures were contemplated for reducing and finally extinguishing the pay to the idle. The following is an extract from an order of the day dated March 16th :

From to-morrow, Friday, the 17th inst., the daily pay of workmen who are not working will be reduced to 1 franc instead of 1½ francs. The director can guarantee to workmen that from this day forward they will be employed at least every other day ; in this case their pay will be 2 francs.

“Already political feeling between the moderate and the extreme sections of the Provisional Government was running high in view of the elections which were fixed for April. The strength of the ‘moderate’ party centred in the Hôtel de Ville, that of the socialists in the Luxembourg. From the middle of March onwards the national works depended politically on the Hôtel de Ville, and were more and more utilized to counteract the influence of the Luxembourg, and to secure the return of the Hôtel de Ville ‘list’ of candidates at the elections. Hence from this time it becomes progressively more difficult to treat the works as a purely economic experiment.

“Private industry was practically at a standstill and workshops were closing every day: some for want of capital, others through strikes of their workmen who had recourse to the national works if their demands were not granted. The Minister of Public Works vainly issued on March 20th a proclamation urging the workmen to return to their workshops, and pointing out that large workshops had been closed or were threatened with closing owing to the crisis. At this time 12,000 men were actually employed at the national works, and the number of men enrolled was increasing very rapidly.

“That the administration of the works was on an altogether unnecessary scale is not denied even by the director, who, however, declared that he was continually under the necessity of finding places for crowds of applicants sent to him with recommendations which he could not resist. Thus a large number of actors, painters, commercial clerks, and others thrown out of work by the crisis, having been refused tickets for admission to the works as not wearing the workman's blouse, were employed by the director as pay agents. Notwithstanding this army of officials it is stated that ‘no serious control was exercised over these crowds of humanity. Many of the workmen had themselves enrolled in several brigades so as to draw wages from each; others came solely for the purpose of drawing wages though they worked as usual in private workshops. Brigadiers exaggerated the number of men in their brigades in order to appropriate the excess wages which they were supposed to distribute, workmen who had a disagreement with their employers combined, deserted their own workshops and went to the national workshops. This was done by the paper stainers and the hatters.’

“Towards the middle of April the numbers enrolled again far outran the number for whom work of any kind could be provided. The director, left to his own resources, organized a few special workshops to employ certain classes of workmen at their own trades. Thus a number of wheelwrights and joiners were employed to mend the tools which were constantly being broken by the inexperienced workmen. Workshops of shoemakers and tailors were also established, from which the more needy and ill-clad of the workmen could be supplied with cheap clothes and boots. It was, however, impossible to persuade the shoe-

makers to accept this arrangement, by which they were compelled actually to work instead of loafing, except by the threat of the alternative of expulsion from the national works. After a time the system, in these special workshops, was changed from time work to piece-work, but not, in most cases, without great opposition from the workmen.

“Another plan of M. Thomas was to attempt to stimulate the building trades of Paris, by advancing to employers who would reopen their workshops a sum of one franc a day, on certain terms of repayment, for each workman employed. He hoped thus to get off his hands a large proportion of the 20,000 members of the building trades who now crowded the national works. The proposal, however, was rejected, as was also a proposition to employ the building operatives in erecting workmen's dwellings.

“The National Assembly, elected by universal suffrage, met on May 4th. A few days later the Executive Commission was elected, containing all the members of the Provisional Government except Louis Blanc and Albert, the Socialist representatives. On May 10th Louis Blanc renewed his motion for a Minister of Labor, which was rejected. On the 15th the Assembly was invaded by the mob, and from that time the anti-socialist tendency of the Government became more marked. The new Government immediately determined to reduce and suppress the national works, which were draining the Treasury and demoralizing the people, and which were suspected of being centres of intrigue on the part of Louis Bonaparte.

“On May 25th a Commission, including a number of engineers and other practical men, was appointed to inquire into the condition of the national works and to devise measures for reducing their cost ‘without prejudice to the sacred principle of the guarantee of work,’ and to superintend the carrying out of these measures. M. Lalanne, an engineer of bridges and roads acted as secretary. The first measure ordered was a complete census of the workmen in the national works. On May 26th the director Émile Thomas was compelled to resign and was sent, practically under arrest, to Bordeaux on the pretext of a commission to study the prolongation of a canal. He was succeeded as director by M. Lalanne. On May 30th the National Assembly decreed the substitution of piece-work for day-work,



but the change was difficult to carry out, and the results were unsatisfactory. On June 15th the Assembly determined on the suppression of the works, and to guard against the consequences an army under General Cavaignac was concentrated on Paris. On June 22nd the proposals for the enlistment of workmen between 18 and 25 and the other measures of reduction detailed in M. Trélat's letter to Émile Thomas of May 24th appeared in the 'Moniteur,' and the same day an attempt was made to organize the first batch of departures from Paris. The result was the bloody insurrection of June 23rd and following days, which, thanks to the military organization of the national works, was only suppressed after three days of street fighting. In the course of the insurrection the Executive Commission resigned, and General Cavaignac became dictator."

#### ENGLAND.

##### *Municipal Relief by Work.*

Perhaps the best example from past experience of the employment of persons out of work directly by municipal authorities is derived from the experience under the old poor law of England, 43rd of Elizabeth. This statute provided that church authorities should "take order from time to time for setting to work all such persons married or unmarried, having no means to maintain them, and use no ordinary and daily trade of life to get their living by; and also to raise . . . by taxation of every inhabitant . . . a convenient stock of flax, hemp, wool, thread, iron, and other ware or stuff to set the poor on work."

This statute, with subsequent amendments intended to more definitely define the duties of authorities, remained in force until superseded by the present method of poor relief under which able-bodied destitute persons are not provided with employment for wages but are relieved in cases of necessity, the family being taken as the unit and any work to which they may be set being considered a test of destitution and not as employment.

The experience under the old poor law is faithfully summarized in a Report of the English Poor Law Commissioners submitted in 1834. It may not have any direct bearing upon present problems, but it at least shows that this form of relief is subject to abuses as grave as any which may arise under the

present system. As showing what municipal employment of labor may become if not carefully controlled the experience is valuable; and, as the record of it is not generally accessible, the condensation of the conclusions of the Poor Law Commissioners is presented here:

The 43rd of Elizabeth does not authorize relief to be afforded to any but the impotent, except in return for work. And much as this part of the statute has been neglected, its validity is recognized by the judges. In the *King v. Collett*, 2 Barnewell and Cresswell, 324, Lord Tenterden decided it to be the duty of overseers to provide work, if possible, before they afforded relief. And whatever may be the difficulty of finding profitable work, it is difficult to suppose the existence of a parish in which it would not be possible to provide some work, were it merely to dig holes and fill them again. But though such is the law, it appears from the Parliamentary Returns that payment for work is the most unusual form in which relief is administered. . . . This may easily be accounted for.

In the first place, to afford relief gratuitously is less troublesome to the parochial authorities than to require work in return for it. Wherever work is to be paid for there must be superintendence, but where paupers are the workpeople much more than the average degree of superintendence is necessary. In ordinary cases, all that the superintendent inquires is, whether the workman has performed an average day's work; and where the work is piece-work he need not make even that inquiry. The practice of his trade fixes the market price of the work, and he pays it without asking whether the workman has been one hour or one day in performing it, or whether it exceeds or falls below his wants. But the superintendent of pauper laborers has to ascertain, not what is an average day's work, or what is the market price of a given service, but what is a fair day's work for a given individual, his strength and habits considered, at what rate of pay for that work, the number of his family considered, he would be able to earn the sum necessary for his and their subsistence; and lastly whether he has in fact performed the amount which, after taking all these elements in calculation, it appears that he ought to have performed. It will easily be anticipated that this superintendence is very rarely given; and that in far the greater number of the cases in which work is professedly required from paupers, in fact no work is done.

In the second place, collecting the paupers in gangs for the performance of parish work is found to be more immediately injurious to their conduct than even allowance or relief without requiring work.

Whatever be the general character of the parish laborers all the worst of the inhabitants are sure to be among the number; and it is well known that the effect of such an association is always to degrade the good, not to elevate the bad. It was among these gangs, who had scarcely any other employment or amusement than to collect in groups and talk over their grievances, that the riots of 1830 appear to have originated. And, thirdly, parish employment does not afford direct profit to any individual. Under most of the other systems of relief the immediate employers of labor can throw on the parish a part of the wages of their laborers. They prefer, therefore, those modes of relief which they can turn to their own account, out of which they can extract profit under the mask of charity.

The Commissioners point out that no uniform system obtained among the different parishes with respect to the kind and duration of labor required or the amount of its remuneration. In some cases the work was extremely irksome and the pay small; in other cases but a small amount of labor was required, and the pay was fixed with respect to the supposed needs of the applicant rather than with respect to the character of the work. Some of the instances cited by the Commissioners are quite interesting. For instance, at Kimpton, Hants:

The single young men are employed by piece-work, but are restricted to earn only two shillings, six pence a week, and are then at liberty to go where they like. In the same place children are employed in picking stones by task, and are allowed to earn the price of a gallon of bread and six pence over per week, which they can do in about four days.

At Uckfield, Sussex, the laborers are required to work a part of each day, so as to earn a sum considered as necessary for their subsistence as fixed by the authorities.

In a parish in Suffolk twenty acres were hired by the parish and laborers employed by piece-work on a price in proportion to their necessities. "Either the work was completed by two or three o'clock and the rest of the day spent in idleness, or the men consumed the whole day in the lazy performance of the work of a portion of the day."

In Pollington, Yorkshire: "They send many of them upon the highways, but they only worked four hours per day; this is because there is not employment sufficient in that way; they

sleep more than they work, and if any but the surveyor found them sleeping they would laugh at them. In Rancliffe they employed a man in the winter of 1830-31 to look over them; but they threatened to drown him, and he was obliged to withdraw. If a man did not like his work, he would say, 'I can have twelve shillings a week by going on the roads and doing as little as I like.'

Some striking instances are given wherein the labor required by the authorities was trifling but the pay either equal to or exceeding that of the independent laborer.

In Eastbourne, in Sussex, the pay received for barely nominal labor was so great that "the wives of the few independent laborers regret that their husbands are not paupers." In the agricultural districts, especially in Northamptonshire, men were sent upon the roads to work. "He is expected to work, not the farmer's hours or anything like them, but to begin at eight, to leave at twelve for dinner, an hour, and to leave the roads finally at four." When the surveyor of the roads was present "the men bestir themselves a little, but the moment his back is turned the man who gives himself any trouble is laughed at by his companions. . . . Whatever the previous character of a man may have been, he is seldom able to withstand the corruption of the roads; two years' occasional employment there ruins the best laborer. Moreover, in very many instances, the difference between parish pay for pretending to break stones on the road, and the real wages given by the farmer (in independent labor in the district) does not amount to more than one shilling a week, and if a man has a family entitling him to receive a given sum by the scale as head money, he receives as much from the parish as he would from any other employer. Accordingly the laborers who are only occasionally employed are nearly indifferent to pleasing or displeasing their employer. They quit with the remark which I heard at least a dozen times from different overseers, 'I can get as much on the roads, as if I worked for you.'

In other places it was found "the laborers are much deteriorated. They do not care whether they have regular work or not; they prefer idle work on the roads. The magistrates at the Uckfield bench told the overseer, year before last, that if the men made complaint they should be allowed at the rate

of two shillings, four pence per head for each member of the family."

The experiences outlined in these extracts were sufficient to show that the abuses of the method of relief by work were sufficient to justify the change of system, and the act of 1834 superseded the old poor law.

*Municipal Relief in Temporary Exigency.*

Among the most extensive as well as the most successful instances of relief through work furnished by the public in times of temporary exigency were the extensive operations conducted at the time of the cotton famine in England occasioned by the blockade of Southern ports during the war of the Rebellion. By the proclamation of President Lincoln, issued on the 29th of April, 1861, the ports of the Southern states were subjected to a strict blockade. This, together with subsequent action by the Confederate Congress and the determination of the British Government to observe rigid neutrality which example was followed later by the French Government, deprived the cotton mills in Lancashire of their supply of raw material. Great distress followed. During the year 1862, as compared with 1861, pauperism in these districts increased at the rate of 47.60 per cent, and from that time forward distress rapidly increased. On the 8th of June, 1863, the Poor Law Board, in their report, remarked, "We have urged upon the Guardians the wholesome practice of setting to work all able-bodied men to whom relief is afforded, and we believe that this practice has to a great extent been followed."

On the 10th of April in the same year it had been stated that out of 216,084 persons, whom a local committee was aiding, 133,231 were either employed in work or in educational classes. In his history of the cotton famine, Mr. R. Arthur Arnold states (page 249), "The question of employment was now one of most serious concern. The relief committees had been from the time of their establishment utterly unable to provide manual labor for all the able-bodied men whom their funds supported and the Guardians, not unnaturally, neglected a requirement which the committees did not make. There were now some 60,000 or 70,000 girls employed in sewing schools and 20,000 men and boys being taught and teaching themselves, all of

whom were accounted to be working for their relief allowances. But there were upwards of 25,000 able-bodied men and boys who were now receiving the means of subsistence without laboring in any way in return for it, . . . large numbers having now been maintained for a whole year in virtual idleness."

This paragraph sufficiently summarizes the situation, and shows the gravity of the problem which confronted the authorities. Mr. Robert Rawlinson was commissioned by Her Majesty's Home Office on the 29th of April, 1863, to proceed to the cotton districts and, after carefully examining the situation, to make a report as to the best means of organizing relief works. The report of Mr. Rawlinson, in considering the subject of organizing relief work for the unemployed, mentions two difficulties, and both these difficulties are such as are likely to confront our own municipalities in similar exigencies. They were, first, financial; and, second, legal. The legal difficulties are summarized in the Sixteenth Annual Report of the Poor Law Board as follows:

1. That in some of the towns under the Local Government Act and in other towns under local Acts the borrowing powers were exhausted.

2. That powers were required for the execution of additional works as well as for the execution of works partly of a public and partly of a private character.

3. That the local authorities were not authorized to undertake works of private improvement for landowners in the neighborhood.

4. That the length of the period required for the entire or partial adoption of the Local Government Act prevented work from being promptly commenced.

5. That Boards of Guardians . . . possessed but very limited powers for the execution of works of sanitary improvement, and were not authorized to borrow money for that purpose.

To afford a legal basis for relief work a special measure was enacted (26th and 27th Vict., c. 70) placing at the disposal of the Public Works Loan Commissioners £1,200,000 which, with other moneys, they were empowered to loan to the authorities in the distressed district for the purpose of undertaking relief work.

Mr. Rawlinson had recommended the appropriation of this

amount for the purpose indicated, and had expressed the opinion that permanent improvements of a beneficial character might be undertaken by the local authorities availing themselves of the loan. He especially mentioned improvements in sewerage, reservoirs for water supply, work upon streets and roads, formation of parks and recreation grounds, the improvement of agricultural land and of rivers, and of other similar works. The loan was authorized by royal assent on the 21st of July. On the 20th of the following January Mr. Rawlinson reported that loans had been granted to the municipal authorities to the amount of £883,706 and that other applications were under consideration. The statement contained in his report as to the reason for the rejection of certain applications for loans indicates that the policy under which loans were granted contemplated the carrying out of works which should be not only of permanent utility but also sanitary improvements. These, indeed, were the twin purposes of the Public Works Act under which the loans were authorized. The great bulk of the expenditure was expected to be upon sewerage and street improvement works.

Mr. Rawlinson had previously referred to this class of work as affording a minimum of employment for unskilled operatives who were in need. He states that skill in the particular direction required was, however, rapidly acquired by factory operatives. They also exhibited superior interest when working under a labor test. As a result of the first employment under the Public Works Act he states that "the peace and order of the district have been completely maintained, and . . . there is reason for satisfaction in the reflection that the improvement of the district rather than the employment of the operatives will have been the useful and enduring result of the 'Public Works Act.'" Some indication of the extent to which the work had advanced by the 1st of June, 1864, may be seen in the fact that during the week ending December 26, 1863, 822 skilled workmen and 2,250 factory operatives were employed in work under the Public Works Act. There were also 2,000 men engaged in outdoor labor paid out of other funds.

On the 7th of the following April Mr. Rawlinson reports that 7,838 men were employed directly or indirectly and receiving payment from funds provided by the Public Works Act and



that, taking into account the number of persons dependent on these workers, about 38,014 persons were supported through the employment furnished under the Act.

He says, however, that "the measure of the benefits of the Act are . . . but very partially represented by this statement. The public works are popular with those who are employed, and the moral effect of the work in prospect as well as in action has been very valuable in its influences upon the unemployed population; and further that this experiment in Lancashire ought to inculcate a lesson for future use, namely, that unskilled men may soon be taught the use of tools where practical means are found to furnish employment. The work must, however, be necessary and useful. The men must have reasonable treatment and equitable payment, if possible, by measurement. All notion of work as a punishment must be removed, and the men must be intelligently and kindly taught. Many of the Lancashire operatives who never worked outside the walls of a cotton mill before this period of distress can now execute sewer and drain trenching in a workmanlike manner and can even lay and joint sewer and drain pipes equal to any skilled laborer. The men have for the most part striven to be useful and to escape from living on the dole of charity. More men might have been earlier at work if in every town and district there had been that diligence and willingness which the crisis demanded."

He then points out that an important element in the success of the work has been the lack of interference on the part of the general Government with its manner of execution. The whole matter, apart from the authorization of the loan by means of which the Government provided legal powers and money under certain favorable conditions, having been left to local supervision and direction. In his returns he had up to that time spoken of skilled and unskilled men, but so rapidly did the unskilled men, that is, men who had previously earned their living in factory employment, acquire the necessary skill in sewer work that he suggests that he may in the future be able to forego the use of the term unskilled altogether.

In July, 1864, an additional sum of £350,000 was authorized to be loaned under the Public Works Act. In a subsequent report Mr. Rawlinson again returns to the point he had previ-



ously made that the local execution of the works apart from Government interference had largely promoted their success. The authorization of the loan by the general Government had been opposed by some who felt that it would be practically a gift if not a loss. Public works undertaken in Ireland had not been an entire success, especially from a financial standpoint. The reason for the failure in Ireland Mr. Rawlinson attributes to the fact that the work was conducted directly by the Government engineers. Contrasting this with the work in the cotton districts which, although supported by a loan authorized by the Government, was carried out under local supervision, he says:

All works undertaken and executed in the distressed cotton districts are necessarily devised, planned, estimated, executed, and superintended by the local authorities, the proviso . . . being that each work shall be one of 'public utility and sanitary improvement.'

The entire ratable value of the property in the district is given in mortgage as security for repayment of interest at  $3\frac{1}{2}$  per cent per annum and the principal by equal annual instalments in thirty years. Private improvements may be effected on similar terms.

It is understood that distressed cotton operatives will be employed on the works as far as is practicable, and also that such works as will offer employment to the greatest numbers of distressed operatives shall be first commenced. The amount of money loaned is not advanced in one sum but by instalments (say, in tenths of the whole); before a second or any subsequent instalment is advanced application must be made to the Poor Law Board for an additional sum; with such application there must be a balance sheet produced, setting forth the details of expenditure, as also necessary plans and sections to show the progress of the works up to the date of application. The works are then inspected, the accounts investigated, and, if found satisfactory, a short report recommends the payment of a further instalment.

Although the Government engineer is in no way responsible for the works, it is his duty to make inspection and to report to the Poor Law Board from time to time as to the character of the works and as to the mode of execution. Advice is freely given by the Government engineer to any local surveyor or local body who may ask for it, and frequently consultations take place and works are modified according to suggestions made on such occasions. Short general rules and instructions as to works have been printed and circulated.

On public works in Ireland . . . the works are entirely devised, planned, estimated, and executed by Government engineers. The land and property owners, or a majority of them, consent to the

works. A loan as per estimate is made by Government on security of the property to be benefited ; but it has been found that in the execution of such works first estimates have been exceeded to the extent in instances of double and even three fold. Repudiation of such excess has then taken place on the plea that the owners of property mortgaged have been deceived. The mortgage, they say, was prepared upon the assumption that estimates prepared by the Government engineers could be relied upon, and ought to be taken as binding in respect to the mortgage.

In Ireland, local authorities, owners, and others, for whom public works have been executed, have neither devised, estimated, nor superintended the execution of such works.

The paragraphs here quoted from Mr. Rawlinson, not only give a clear idea of the manner in which the money was loaned by the English Government for the execution of the works under the Public Works Act in the manufacturing districts, but also show the important differences between the methods of conducting such work in Lancashire and in Ireland. These differences Mr. Rawlinson believed to be sufficient to account for the success of the Lancashire work, while that in Ireland had not been entirely successful. The provisions of the Public Works Act clearly show that the province of the general Government, or, as we should say, of the State, was to support work under local control in the different districts by a loan of public money. The stipulations, to which the local authorities were obliged to conform, being confined to the character of the work undertaken, in that it must be work of permanent utility and sanitary improvement, to restricting employment to those needing relief in such work, and to provisions intended to secure the legitimate execution of the purpose for which the loan was authorized, and providing for security and repayment of the loan. Under similar conditions improvement of private property could be carried out, the cost being defrayed by money loaned by the Government, subject to the general limitations mentioned.

Those directly interested in the improvements, whether public or private, were given perfect liberty to control them both in design and execution.

The summary presented by Mr. Rawlinson in his report submitted January 25, 1865, contains interesting comments upon

the experience up to that date, and is worth reproducing for the light it throws upon the extensive operations which were carried out:

The public works in Lancashire have served to prove that willing and intelligent men can soon learn a new occupation when stern necessity forces them to it and a fair opportunity is afforded them.

It was said previous to this great trial that cotton factory workers were entirely unfitted for any other sort of labor than that of attending to machines in heated factories or of working at the loom. It was also asserted that using the pick and the spade would ruin their hands and fingers by destroying that delicacy of touch required in manipulating cotton thread. Experience, however, teaches the contrary, and further shows that in a month or six weeks the cotton worker's hands harden to rough out-of-door work, and breathing fresh air under the excitement of a new exercise helps to set the muscles, and speedily to strengthen both the appetite and the man's bodily frame. It must, however, be remembered that this is not true of all factory workers, but only of a portion of them, and these the best morally and physically.

The public works executed in Lancashire have been in a great degree undertaken by volunteers from amongst the distressed factory operatives. That is, by men willing and wishful to escape from dependence on either the dole of charity or the taint of pauperism. The work has not been 'test work,' and yet it has proved the most effective form of test. Willing men have accepted the work so soon as it has been offered to them, and they have striven to the uttermost of their ability to earn an honest and independent living at it. Unwilling men have moved away to some other district or have managed to do without this form of labor, and thus the Local Relief Committees and the Poor Law Guardians were for the most part as effectually relieved from their presence as if they had remained at work. It will be, however, a great mistake to look on this Lancashire experiment as proving that large numbers of men may suddenly be turned from one occupation to another wholesale. This has not been accomplished in Lancashire, nor will it ever be practicable. Out of thousands of men involuntarily idle, hundreds only have had profitable work found them. This has, indeed, been brought as a charge of failure against the Public Works Act. The notion seems to have been prevalent that all the distressed men as enumerated and published in the weekly returns could and would be set to work at once on the passing of the Act, and when this was seen not to be the case a charge of 'failure' has been made.

The experiment of attempting to provide labor wholesale for large

numbers (whole masses of men) was tried in Ireland during the years of famine and utterly failed . . .

If Government engineers had been sent down to set out works on which to find employment for all the distressed men, the best and the worst alike, there could have been no choice, no independence, no emulation, so that the incapable, the unwilling, and the idle would have leavened the entire mass. Fortunately . . . the works have been divided and subdivided so that men in small gangs could be employed and there duly mixed with skilled workmen and entirely directed by local superintendence.

In my opinion, the public works in Lancashire have been a great success ; but I also consider that all the contingencies must be taken into account. It will not be wise either to praise them extravagantly or to blame them unduly, but fairly to examine the experiment in its strength and in its weakness.

In the following year, Mr. Rawlinson alludes to the resumption of work in the cotton mills, which, of course, diminished the number of men employed in public works, and in the following language speaks of the prevention of pauperism by means of relief through work, rather than by direct doles of money :

I am informed, on the authority of Poor Law Officers in the district, that the prevention of pauperism by means of the public works was at least to the extent of three times the number of men employed upon them. These works relieved the district of direct imposture to an extent which cannot be calculated. When useful work could be tendered in place of relief, all men who would not attempt work were struck off the relief lists and were disposed of, so far as any requirement for charity was concerned.

It is not pleasant to give such an example of the working of the Act, but it is much the best to know and to understand the truth. If makeshift works had been devised on which to place every applicant for relief at a low rate of pay, the result would have been disgraceful failure. The good and honest would have taken no interest in test labor, and the example of the idle and worthless would have influenced the whole mass of labor. The works devised were, however, *bonâ fide* works, and the men were, to a considerable degree, self-selected, and were consequently earnest and honest workers.

Mr. Rawlinson further speaks of the moral effect upon the workmen, who soon, by a process of natural selection, acquired

by Professor James Mavor to the English Labor Department is one of the most clear, fair, and at the same time critical descriptions we have been able to consult, and to Professor Mavor's analysis we are greatly indebted for the following condensed summary.\*

The German colonies are intended to temporarily deal with able-bodied unemployed men, apart from the family, which is not considered under the German system.

### *Origin of the Colonies.*

The first German colony was established in Wilhelmsdorf in Westphalia in 1882. This was due to the personal enthusiasm

NAME OF COLONY.	INCOME			
	SUBSCRIPTIONS			PUBLIC GRANTS
	Members' Subscriptions and Collections	Societies and Corporations, Savings Banks	Church Collections and Donations	The State
	Marks	Marks	Marks	Marks
1 Alt-Latzig, . . . . .	11,000	-	-	-
2 Ankenbuck, . . . . .	6,100	1,400	-	7,000
3 Berlin, . . . . .	15,600	3,000	400	-
4 Carlshof, . . . . .	5,200	-	1,500	-
5 Dauelsberg, . . . . .	300	-	-	-
6 Dornahof, . . . . .	31,000	6,250	-	5,500
7 Elkenroth, . . . . .	25,000	300	-	-
8 Erlach, . . . . .	3,400	1,300	-	-
9 Fried-Wilhelmsdorf, . . . . .	7,400	5,900	-	-
10 Friedrichawille, . . . . .	8,190	-	-	-
11 Hamburg, . . . . .	26,800	-	-	-
12 Hohenhof, . . . . .	n. s.	n. s.	n. s.	n. s.
13 Kästorf, . . . . .	33,800	350	-	-
14 Lühlerhelm, . . . . .	18,300	-	-	-
15 Magdeburg, . . . . .	2,100	200	-	-
16 Maria-Veen, . . . . .	n. s.	n. s.	n. s.	n. s.
17 Meierel, . . . . .	6,450	-	-	-
18 New-Ulrichstin, . . . . .	10,200	1,800	-	3,000
19 Rickling, . . . . .	2,000	3,700	-	-
20 Schneckengrün, . . . . .	4,000	400	100	8,000
21 Seyda, . . . . .	-	130	n. s.	3,000
22 Simonshof, . . . . .	37,200	-	-	4,000
23 Wilhelmsdorf, . . . . .	24,000	500	2,000	-
24 Wunscha, . . . . .	5,150	300	-	-

n. s. Not Stated.

\* The statistics of the German colonies are mainly derived from "Die Deutscher Arbeiter-Kolonien," a statistical summary, published by Dr. G. Berthold, of Berlin. The latest volume, 1893, in German, may be consulted at the office of the Bureau.

and humanitarian impulses of Pastor von Bodelschwingh of Bielefeld. Other colonies followed in various parts of the German Empire, the total number now being 26. Of these, three are under Roman Catholic auspices, the remainder being Protestant.

*Resources and Means of Support.*

The colonies are supported by state and municipal grants, private donations, especially from members of the provincial societies, and from collections in the churches and from house-to-house. The following table exhibits the income and expenditure derived from these different sources of those colonies for which statistics are available :

INCOME				LOANS				Expendi- ture <sup>a</sup>	
PUBLIC GRANTS			Total	FROM PUBLIC SOURCES		FROM PRIVATE SOURCES			
Local Public Grants				Free of Interest	Bearing Interest	Free of Interest	Bearing Interest		
Province and Country	Kreis and Bezirk	Town							
Marks	Marks	Marks	Marks	Marks	Marks	Marks	Marks	Marks	
4,000	1,500	-	16,500	-	-	-	50,000	21,100	1
-	3,600	2,800	20,900	10,100	-	-	-	42,300	2
-	-	8,000	27,000	-	-	-	165,000	178,700	3
15,000	2,750	-	24,450	-	-	-	-	38,400	4
-	-	-	300	-	-	-	-	19,200	5
-	13,400	-	56,150	-	-	81,850	101,400	n. s.	6
11,000	-	-	26,300	100,000	-	-	-	22,200	7
-	3,400	-	8,100	-	-	-	-	n. s.	8
-	500	-	13,800	19,000	5,000	3,000	42,000	46,000	9
11,000	25,300	30	44,520	-	-	-	-	58,200	10
-	-	-	26,800	-	-	-	-	n. s.	11
n. s.	n. s.	n. s.	n. s.	60,000	-	-	-	-	12
-	3,800	900	33,650	145,000	5,000	-	51,000	50,400	13
10,000	-	500	28,800	100,000	-	-	-	66,300	14
-	-	-	2,300	-	-	-	15,000	32,000	15
6,000	n. s.	n. s.	n. s.	84,000	n. s.	n. s.	n. s.	n. s.	16
-	10,800	-	17,250	140,900	104,000	-	-	60,000	17
3,000	1,750	200	19,950	-	-	-	-	74,300	18
25,000	-	8,300	44,000	-	-	-	61,000	95,500	19
500	4,500	5,300	22,800	-	-	-	60,000	22,400	20
10,000	2,150	-	15,280	-	-	-	-	59,200	21
3,500	6,850	-	51,550	-	-	-	161,100	116,300	22
6,000	5,000	5,100	42,600	116,000	-	5,000	-	75,000	23
10,000	4,400	100	19,950	90,000	-	-	-	24,300	24

n. s. Not Stated.

\* Including value of agricultural and other commodities produced and consumed.

*Methods of Administration.*

The colonies are administered by the German Labor Colony Central Board (*Centralvorstand Deutscher Arbeiter-Kolonien*). The Board comprises two representatives from each province to which the system has extended. The Board holds an annual meeting, generally continuing two days, at which reports are received from the several representatives and methods of administration, etc., are discussed. The Board was founded in 1883. Its policy is as follows:

1. The colonies are institutions of Christian charity, in which any one who has suffered inward or outward shipwreck, or who stands in danger of so suffering, may be received and raised again. Colonists have no legal claim to the benefits of the institution.
2. All able-bodied men who are willing to work are admitted without distinction of character or religion so long as there is room.
3. Dipsomaniacs are not admitted, or, if admitted, may be expelled.
4. The special aim of the colonies is to secure the permanent moral elevation of the colonists.
5. The house regulations of the colonies are the same throughout.
6. Board and lodging must not be in excess of the strictest requirements.
7. The scale of pay (board, lodging, and payment in cash or clothes, etc.) must be lower than the daily wage prevailing in the locality.
8. Dismissal is the only form of punishment.
9. Colonists dismissed for ill behavior shall not be admitted into another colony without the consent of the colony which discharged them.

The labor colony system includes, besides the colonies proper (*Arbeiter Kolonien*), relief stations (*Verpflegungs-Stationen*) workmen's lodging houses (*Herbergen zur Heimat*), and labor bureaus (*Arbeitsnachweis-Anstalten*).

Besides the central colonies there are branch colonies, and there are institutions for the purpose of training the superintendents of these various agencies.

While, as has been stated, the German colonies in general deal only with unmarried men or with men separated from their families, there is a single exception in the case of the colony at



Friedrich-Wilhelmsdorf, which is classed as a "Home" colony or place of resort for families. This has existed since September, 1886, and is a step toward a further development of the system which will be spoken of hereafter.

Two of the colonies are city, rather than farm colonies, being located at Hamburg and Berlin. The others are agricultural colonies, located in country districts.

Men may freely enter the colonies, no discrimination being made except that those who enter must be able-bodied and willing to work and must not be dipsomaniacs. Drunkards willing to abandon intoxicating drink, which in any form is forbidden, may be admitted.

Men may also freely leave the colonies, and long periods of residence are discouraged. In no case is a colonist permitted to remain longer than two years. "The object of this regulation," says Professor Mavor, "is to prevent the colonist from acquiring under the German law of settlement a domicile in the colony, which would render the commune in which the colony is situated liable for his maintenance as a pauper, should he ultimately come upon the poor roll."

Professor Mavor continues :

Although this regulation is necessarily observed in the letter, some of the colonists are nevertheless practically permanent residents. At Wilhelmsdorf, for example, six men take a fortnightly holiday every two years, and thus evade the law. So long as they make themselves useful in the colony (and such men do) there is no reason why the colony should thrust them out. After having remained away long enough to escape the provisions of the law of settlement they return to their former positions as cowkeepers or what not. This practice exists, I believe, at all the colonies, and accounts to some extent, although not to a large extent, for the frequency of readmissions.

The colonies are administered upon the same general plan, differing in minor details. The regime at Wilhelmsdorf may be taken as indicative of the general plan and the following summary is condensed from Professor Mavor's report :

Upon the arrival of the applicant at the colony his credentials are examined. The applicant is usually provided with these



owing to the stringent police regulations respecting vagrancy. They may consist of discharge papers from some penal institution, records of previous employment, or the *Wanderschein*, a paper which, in Germany, gives a record of the progress from place to place of those who frequent the workmen's lodging houses or relief stations.

The applicant is then given a meal and set at work temporarily, usually at field work or ditching. Meanwhile inquiries are made through the police to determine whether the applicant is a fugitive from justice. In case this is found to be the fact he is surrendered to the authorities. Otherwise, no matter what his previous record may be, he is permitted to remain, unless he misconducts himself within the colony.

For the first 14 days after his arrival the colonist receives maintenance but no wages. After this, he receives, besides board and lodging, from 5 cents to 7½ cents \* per day. Clothes, if needed, are furnished on credit. The rate of wages is not uniform and is wholly within the discretion of the colony director. The average wage during the nine months within which outdoor work is possible is 25 pf. per day (about 6½ cents) and, during the remainder of the year, 20 pf. (about 5 cents). Wages are not paid in cash until the colonist leaves the colony, and the amount earned is then sometimes increased by a bonus on account of good conduct. Many of the colonists leave in debt however, the advances in the form of clothes and tobacco exceeding the amount of wages earned.

Concerning this question of debt, Professor Mavor says :

Of the 104 persons who entered Wilhelmsdorf during the three months ending 31st March, 1893, 91 had left the colony on 6th of August.

	Marks.	Pf.
Of these 91, 35 left in debt, the aggregate amount being	223	12
An average of 6 mks. 37 pf. per head.		
Of these 35 eight repaid their debts, amounting to . . . .	49	10
There left without cash and without debt 20, and there left		
with cash 36, to the amount of . . . . .	132	14
An average of 3 mks. 67 pf. per head.		

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\* 20 pf. to 30 pf.

This question of debt is in some ways likely to be a serious one. The loss to the colony in the period in question at the rate of about £35 per annum is not very great, but the influence upon the colonist cannot be good. What occurs is simply that men come for a few weeks to the colonies, get clothes on credit, and then go off on the tramp. If, on the other hand, the colony were permitted to detain a colonist until his clothes had been paid for, there would at once be an infringement of the principle of liberty of movement which the colonies hold sacred, and the door would be open to some of the incidents of the sweating system which might, in spite of the philanthropic character of the colonies, work to their disadvantage. It is true that when a colonist secures a situation through the colony, the colony requires the employer to undertake to pay out of the wages earned by the colonist the debt due to the colony. There are two drawbacks to this system. In the first place, the employer does not always pay, and the colony does not always think it worth while to pursue him for payment; and in the second place, there is an inducement for the colonist who is in debt to go on the tramp in the hope of getting for himself a situation, in which case he would be relieved of the inconvenience of having the colony debt stopped out of his wages.

The daily programme is as follows: On week days the colonists rise at from 5 to 5.30 in winter, at 4.30 in late spring and at 4 in summer. On Sundays the rising hour is from 6 to 6.30 in winter and at 6 in late spring and summer. Twenty minutes after rising what is called the first breakfast is served consisting of coffee, black bread, and beet jelly. Twenty minutes after this occurs the morning service. At 9 o'clock in winter and at 8.30 in late spring and summer the second breakfast is served consisting of black bread with lard or butter or cheese. Dinner is served at noon, consisting of vegetables, including potatoes, also pig's fat three times a week.

An afternoon meal is carried to the fields in late spring and summer at half past three, — coffee, bread, and lard; and supper is served at 5.50 in winter, at 7 in late spring and at 8 in summer, consisting of milk (or rice or peas), soup, potatoes, with herring occasionally.

The men in the colony during the summer of 1893 were employed as follows:

OCCUPATIONS.	Paid Foremen	Colonists
Joiners, . . . . .	-	8
Shoemakers, . . . . .	-	2
Tailors, . . . . .	1	1
Smiths, . . . . .	-	4
Coppersmith (working also in sheet iron, tin, and zinc), . .	-	1
Masons and bricklayers, . . . . .	-	6
Dining-room service, . . . . .	-	2
Laundry (for three days in each week), . . . . .	-	3
Vegetable gang, . . . . .	-	8
Farm-yard hands, . . . . .	-	9
Field workers, . . . . .	2	76
Garden, . . . . .	-	7
Clerk, . . . . .	-	1
TOTALS, . . . . .	3	123

The reclamation of agricultural land by trenching, peculiarly adapted to the conditions obtaining at Wilhelmsdorf, occupies much of the labor of the field hands even in the winter. In the afternoons during the harvest seasons the whole of the men are employed in the fields.

#### *Who Resort to the Colonies?*

Do the unemployed workmen of capacity and skill resort to the colonies, or are they chiefly used by those who, for various reasons, are industrially inefficient, either through moral or physical defects, or who have been thrown out of the ordinary channels of industry through misfortune or misconduct? Some light is thrown on this question by the statistics for 22 colonies, showing the number of men who, before admittance in the two years 1889-91, had been in prison, and the number who had not been thus punished. These statistics are presented in the following table:

WHERE IMPRISONED.	Number	Percentages
Lock-up, . . . . .	3,664	33.00
Prison, . . . . .	1,684	15.20
State prison, . . . . .	125	1.10
Lock-up and prison, . . . . .	1,650	14.90
Lock-up and State prison, . . . . .	54	0.50
Prison and State prison, . . . . .	201	1.80
Lock-up, prison, and State prison, . . . . .	255	2.30
Lock-up and correction, . . . . .	784	7.10
TOTAL IMPRISONED, . . . . .	8,417	75.90
Not previously imprisoned, . . . . .	2,671	24.10

The number of times these men had been admitted to the colonies is shown in the following table :

NUMBER OF TIMES IN COLONIES.	IMPRISONED									Not Im- prisoned
	Lock- up	Prison	State Prison	Lock-up and		Prison and State Prison	Lock-up, Prison, and State Prison	Lock-up and Correc- tion	Total Im- prisoned	
				Prison	State Prison					
1 . . . .	1,958	897	90	614	26	115	110	353	4,163	1,793
2 . . . .	747	325	15	361	12	40	67	167	1,734	596
3 . . . .	383	201	16	243	7	15	24	96	985	181
4 . . . .	229	112	8	169	7	13	24	69	626	96
5 . . . .	152	63	1	113	1	8	13	49	400	40
6 . . . .	86	34	-	66	-	3	11	25	225	27
7 . . . .	43	24	-	35	-	4	2	11	119	18
8 . . . .	29	9	-	18	1	1	2	8	68	4
9 . . . .	15	12	-	11	-	2	2	3	45	2
10 . . . .	10	4	-	10	-	-	-	3	27	2
11 . . . .	4	2	-	4	-	-	-	-	10	2
12 . . . .	2	1	-	3	-	-	-	-	6	-
13 . . . .	4	-	-	2	-	-	-	-	6	-
14 . . . .	-	-	-	-	-	-	-	-	-	-
15 . . . .	-	-	-	-	-	-	-	-	-	-
16 . . . .	1	-	-	1	-	-	-	-	2	-
17 . . . .	1	-	-	-	-	-	-	-	1	-
TOTALS, . .	3,664	1,684	125	1,650	54	201	255	784	8,417	2,671
PERCENTAGES,	33.00	15.20	1.10	14.90	0.50	1.80	2.30	7.10	75.90	24.10

The important fact disclosed by the foregoing tables is that about 75 per cent, or three-fourths of the total number admitted to the colonies, had previously been in prison. Of these, the larger part (33 per cent of the total number admitted) were punished in the lockup for minor offences, drunkenness and begging predominating.

Professor Mavor presents the following table, showing the causes of resort to the colony of 117 colonists at Wilhelmsdorf on the 7th of August, 1893 :

CAUSES.	Number Previ- ously in Prison	Number who had not been in Prison	Doubtful Cases	Total
Ascertained inability to obtain employment, without visi- ble specific cause, . . . . .	-	2	-	2
Apparent inability to obtain employment, without visible specific cause, . . . . .	-	1	-	1
Ascertained inability to obtain employment owing to hav- ing been in prison, . . . . .	3	-	-	3

CAUSES.	Number Previ- ously in Prison	Number who had not been in Prison	Doubtful Cases	Total
Apparent inability to obtain employment owing to having been in prison, without other visible specific cause, . . .	45	-	-	45
Drink as an ascertained specific cause, . . . . .	8	8	1	17
Drink and laziness as specific causes, . . . . .	-	1	-	1
Drink as a probable specific cause, . . . . .	3	1	-	4
Sent by relations (deaf mute), . . . . .	-	1	-	1
Sent by relations owing to alleged bad conduct, . . . .	1	-	-	1
Sent by parish with consent (cripple), . . . . .	-	1	-	1
Sent by parish with consent (for bad conduct), . . . .	1	-	-	1
Epileptic, . . . . .	1	-	-	1
Bad conduct, . . . . .	1	-	-	1
Domestic misfortune, . . . . .	1	-	-	1
Domestic misfortune and sickness, . . . . .	-	1	-	1
Confirmed begging, . . . . .	1	-	-	1
Uselessness, . . . . .	-	1	-	1
On trial by institution (special case), . . . . .	-	1	-	1
Unknown causes, . . . . .	-	31	2	33
TOTALS, . . . . .	65	49	8	117
PERCENTAGES, . . . . .	55.50	41.90	2.60	100.00

These figures may be regarded as to a large extent typical. Of the 117 colonists considered, 55.50 per cent, a proportion slightly less than that disclosed in the preceding tables which were based on a much larger number of cases, had been in prison. Forty-five colonists, not quite one-half of the total number admitted, were there on account of apparent inability to obtain employment owing to having been in prison, without other known specific cause.

In 33 cases the cause of resort to the colony was not given, being tabulated as unknown. In two cases there was ascertained inability to obtain employment without known specific cause. In nearly all other cases either moral or physical defect was shown. These figures indicate that the colonies do not deal with the evil of unemployment in what may be termed the efficient industrial class. That, indeed, is not the prime purpose of the colonies, as set forth in the statement of the Colony Board as to its policy, but rather to deal with those who have suffered "inward or outward shipwreck," and to secure their "moral elevation."

More complete statistics as to the previous condition of the colonists, or as to the reasons that impel them to enter the colo-

nies, appear to be lacking. The fact of previous imprisonment appears to be the prime cause, affecting as it does three-fourths of those who enter.

Professor Mavor points out that :

The narratives of the colonists themselves are frequently more romantic than veracious. They nearly always regard themselves as victims of the rapacity or coldheartedness of others. A few of them are audaciously frank in acknowledging that they alone are to blame for their appearance in such company.

Only a few apparently enter the colonies direct from prison. The obvious explanations of this fact are thought by Professor Mavor to be "that they endeavor to secure employment, or that they return to their friends for a time, or that they prefer to the restrictions of a colony the free life of a tramp, which they may have by means of the *Verpflegungs-Stationen* or relief stations." \*

The total number of admissions to the colonies, from the establishment of the first colony up to June 30, 1893, was 63,394, and the number of discharges was 61,334. The number of places in the colonies at present is 3,044.

The ages of those who enter are shown in the following table, with percentages, covering 44,807 admissions prior to March 31, 1891 :

AGE PERIODS.	Percent-ages	AGE PERIODS.	Percent-ages
Under 20 years, . . . .	5.00	40 but under 45 years, . . . .	13.50
20 but under 25 years, . . . .	10.50	45 but under 50 years, . . . .	10.90
25 but under 30 years, . . . .	13.30	50 but under 60 years, . . . .	12.10
30 but under 35 years, . . . .	15.40	60 years and over, . . . .	3.20
35 but under 40 years, . . . .	15.50	TOTAL, . . . .	100.00

That the colonies are largely inhabited by the homeless is shown by the following table, covering 22 colonies for the period 1889 to 1891 :

\* See p. 40.

CLASSIFICATION.	Number	Percentages
With domicile, . . . . .	4,153	37.50
For the first time, . . . . .	2,730	24.60
Not for the first time, . . . . .	1,423	12.90
Without domicile, . . . . .	6,935	62.50
For the first time, . . . . .	3,230	29.10
Not for the first time, . . . . .	3,705	33.40
Aggregates, . . . . .	11,088	100.00
With domicile, . . . . .	4,153	37.50
Without domicile, . . . . .	6,935	62.50

Professor Mavor states :

The practices of the colonies, however, vary considerably as to the length of time during which colonists are permitted to stay. The practice not only varies as between colony and colony, but from year to year. In some colonies there is an apparent tendency to relaxation of the rule enjoining the expulsion of colonists as soon as possible, while in others the earlier discharges have tended to become more numerous, thus indicating an increasing stringency. Those colonies in which the first practice is observable have probably been the resort of an improving sort of colonists, while the contrary has probably been the case with those colonies which have become more and more stringent.

The following table shows the causes of discharge, by percentages, during certain specified periods :

CAUSES OF DISCHARGE.	PERCENTAGES			
	From April 1, 1885, to March 31, 1886	From April 1, 1886, to March 31, 1887	From April 1, 1887, to March 31, 1889	From April 1, 1889, to March 31, 1891
Obtained situations, . . . . .	27.40	24.70	20.80	19.70
Own wish, . . . . .	54.10	57.80	60.40	64.50
Drunkenness, . . . . .	1.50	0.80	0.50	0.70
Laziness, . . . . .	1.70	1.50	1.80	1.20
Unfitness for work, . . . . .	0.40	0.50	0.70	0.90
Bad conduct, . . . . .	3.50	4.10	4.40	3.70
By direction of authorities, . . . . .	1.40	1.10	1.10	1.20
For sickness, . . . . .	2.00	2.40	2.20	2.20
Time expiry, . . . . .	5.60	5.10	5.50	2.20
Absconded, . . . . .	2.40	2.00	2.60	3.70
TOTALS, . . . . .	100.00	100.00	100.00	100.00

Many of the colonists have been repeatedly admitted, as shown by the table on p. 31. Professor Mavor points out this as one of the features of the system. He says:

The habit of going from one colony to another, or of repeatedly applying for admission to the same colony, has produced a new type, or at all events, has resulted in a new name, the colony-bummler. To *bummel* is a verb with which the German vagabond is familiar in all its moods and tenses. Primarily it means 'to loaf;' but it has come to mean not to loaf in the colony, but to arrive at it frequently, to loaf outside and then to drop into the colony at regular or irregular intervals. There are certain notorious bummlers whose visits are expected at the colonies with as regular a periodicity as the phases of the moon.

Many cases of this sort are reported in detail by Dr. Berthold and some are reproduced by Professor Mavor. They are not unlike certain incorrigible victims of drink, who are repeatedly and periodically returned to our minor prisons.

In the 22 colonies previously referred to, during the period 1889-91, of the total admitted cases 53.70 per cent had been in the colonies only once, and 46.30 per cent more than once. About one-fourth of the number discharged during a two-years period may be expected to return within the period. The exact figures upon this point are shown in the following table:

PERIODS OF YEARS.	Number of Cases admitted into the Colonies	Number of Persons Admitted	Percentage of Persons discharged during the Period, who returned during the Period
First period of two years, 1887-1889, . . .	13,575	10,403	23.40
Second period of two years, 1889-1891, . . .	15,425	11,088	28.10

The repeated admissions suggest the following comments by Professor Mavor:

The repeated admissions into the German colonies as disclosed by the statistics, together with such knowledge as one can obtain of the types of men that make up the ranks of the 8,000 who pass through the colonies annually, show that the colonies are dealing with a body of at least 4,000 men, who are for various reasons unable to regulate their own lives on an independent basis, or who are unable to get or



to keep employment under customary conditions. Although the colonists are free to go from or to stay in the colonies, when they elect to stay they must conform to the discipline imposed upon them. There thus appears to be a certain class, amounting to one-half of the cases dealt with, who are willing, or who feel themselves forced, to exchange the freedom of ordinary industry without guarantee of subsistence, for the practical, though mild, slavery of the colonies with guarantee of subsistence.

The colonies are most fully inhabited during the winter months. The number of applications exceeds the number for whom it is possible to provide in nearly every month, but this is markedly the fact in winter, as shown by the following table :

MONTHS.	ADMITTED		SENT AWAY FOR WANT OF ROOM IN COLONIES	
	1890	1891	1890	1891
January, . . . . .	577	556	674	543
February, . . . . .	474	576	624	382
March, . . . . .	535	559	295	101
April, . . . . .	418	612	94	10
May, . . . . .	500	548	65	14
June, . . . . .	513	554	64	5
July, . . . . .	515	624	49	-
August, . . . . .	506	602	37	8
September, . . . . .	487	540	13	22
October, . . . . .	912	829	116	89
November, . . . . .	890	1,082	397	321
December, . . . . .	635	663	1,130	463
TOTALS, . . . . .	6,962	7,745	3,558	1,958

### *How Long do Colonists Remain?*

It has been stated that prolonged residence is discouraged. From April 1, 1889 to March 31, 1891 there were in 22 colonies 15,425 admissions including 11,088 individuals, and there were 13,307 discharges within the same period. The length of residence is shown in the following table :

LENGTH OF RESIDENCE.	Percentages of Number of Colonists	LENGTH OF RESIDENCE.	Percentages of Number of Colonists
7 days, . . . . .	6.10	106 to 147 days, . . . . .	18.60
8 to 14 days, . . . . .	4.30	148 to 203 days, . . . . .	10.30
15 to 21 days, . . . . .	4.30	204 to 259 days, . . . . .	3.60
22 to 35 days, . . . . .	8.50	260 to 315 days, . . . . .	1.60
36 to 49 days, . . . . .	9.40	316 to 364 days, . . . . .	0.80
50 to 63 days, . . . . .	8.90	365 days and over, . . . . .	1.50
64 to 77 days, . . . . .	8.50		
78 to 106 days, . . . . .	13.60	TOTAL, . . . . .	100.00

### *Why do Colonists leave the Colony ?*

The table, page 34, shows the causes of discharge from the colonies, by percentages, during certain specified periods. Reference to the first line of the table discloses the fact that the number of colonists who left because they obtained situations outside the colony, while but slightly more than one-fourth the whole number who left during the year ending March, 1886, declined to less than one-fifth the whole number who left during the year ending March, 1891. On the other hand, more than 54 per cent of the whole number who left during the year first named were discharged at their own desire, and during the year last named this class constituted more than 64 per cent of the total number of discharges. The number discharged for each of the other causes named in the table were, in each case, few, and constituted small percentages of the total. The proportion of those who left on account of the expiration of the time within which they were permitted to remain, nearly 6 per cent of the total discharged in the year ending March, 1886, has declined to less than 3 per cent in the year ending March, 1891.

The figures contained in the table give some indication, quite slight and inconclusive, however, on the reformatory influence of the colonies. No exception can be taken to the use of the word "reformatory" as this, it will be remembered, is one of the central features of the colony system. Not only is the colony intended to deal with the "inward or outward shipwrecked" class, but the special aim "is to secure the permanent moral elevation of the colonists." Of the colonists who do not return after being discharged no record is kept or known. As to whether the colony life has had a salutary effect upon them or

not nothing can be definitely predicated. Few, however, appear to enter industrial life through the colony or directly from it, and this percentage continues to decline. Moreover, of 2,623 who obtained situations, 814 returned to the colony; and of 8,564 who left voluntarily 3,117 returned within two years.

Professor Mavor expresses the opinion that the situations when secured are frequently of an inferior order. This he attributes to two reasons:

First, in the case of a colony situated in the midst of a district where agriculture is carried on partly by large farmers and partly by small farmers . . . it is, I believe, the case that the large farmers will not employ the colonists.\* . . . Small farmers . . . can only afford to pay extremely small wages. . . . I have even been told that in some cases, in spite of the efforts of the colony to the contrary, ex-colonists have been employed at wages rather lower, and have been boarded at small farms in rather less comfortable conditions than were those which they had in the colony, their acceptance of lower wages being clearly due to their estimate of the value of free labor . . . as contrasted with the restrictions of the colony.

Second, in cases where situations are found at a distance, all depends upon the extent to which the employer takes advantage of his knowledge of the antecedents of an ex-colonist to cheapen his labor.

#### *The Economic Effect of the Colonies on Outside Industry.*

It may be thought that the competitive influence of the colonies is injurious. Under the conditions obtaining in Germany this does not appear to be the case. Apparently, the rate of wages to outside laborers in general is not affected by the rate paid to the workers within the colonies, nor does the surplus produce of the colonies, which is sold in open market, affect the price of similar commodities produced outside. The two arguments employed in support of this view are thus stated by Professor Mavor:

First, that in Germany wages are regulated to a great extent by custom, and only to a small extent by the operation of the laws of supply and demand of labor; and second, that the material dealt with

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\* Attributable to the doubt whether the colonist has been cured of the defect which caused him to enter the colony.

by the colonies does not in any real sense enter the competitive labor market, and would not do so even if the colonies were non-existent.

Professor Mavor thinks, however, that the extent to which customary wages obtain in Germany is probably not so great as it used to be, and that it is conceivable that a colony might produce a change in its neighborhood, and he points out that "there can be little doubt that, as a rule, the employers who seek to employ ex-colonists do so because they imagine such labor can be obtained at a low rate of wages. Employers who employ at low rates of wages, however, generally find in the long run that low wages mean dear work. Thus the ex-colonist is dismissed or resigns; in any case he finds his way back to the colony, and the process is repeated." He also observes that "although the numbers concerned are relatively small . . . the minimum subsistence wage fixed by the colony for the purpose of inducing men to seek outside employment, may tend to some extent to become the maximum wage for low grade labor in the district."

From what has been said of the antecedents and character of the colonists it will appear that the second point is well taken, and that they are practically non-effective industrially, and besides this the colonists do not to any great extent become effective on leaving the colonies. They are largely a class apart, and while within the colony or during their periodical returns to the outside world have little influence upon regular employment or the ordinary industrial operations without. Professor Mavor sums up his conclusions upon this point in the following paragraph :

The colonies do not interfere with the labor market, because they do not deal with the problem of the want of employment of the respectable workman. It is because the colonist is non-efficient that he does not compete in the labor market. If the colonies turned out annually large numbers of regenerate laborers, they would compete. It is not alleged that injury would result from their doing so; but the element of non-interference with the processes of ordinary industry, which at present is claimed for the colonies, would disappear, and it would depend upon the skill with which they were administered, whether or not they wrought to social disadvantage, however benevolent might be their intentions.

The colonies, it should be remembered, are mainly agricultural, and by far the larger part of their produce is consumed within them. This operates to reduce to the minimum any competitive effect which the sale of produce in the market might have upon prices. The manufacture of brushes and toys in the city colonies is said to be regarded unfavorably by outside makers of these articles, somewhat as the manufacture of brushes within prisons in Massachusetts is looked upon by manufacturers and workmen competitively affected.

The colonists are largely employed upon the reclamation of agricultural land within the colony limits, and, as in the case of the colony at Wilhelmsdorf especially, in road-making in the forest country surrounding the colony. No reclaimed land has yet been put upon the market, and the value placed upon it due to improvement under the labor of the colonists is speculative, and subject to considerable differences of estimate.

#### *The German Relief Stations.*

The *Verpflegungs-Stationen*, or relief stations, in Germany are in general plan somewhat like the so-called "Wayfarers' Lodge" on Hawkins street, in Boston, and similar institutions. They are shelters within which the applicant may find lodging with meals for which he is expected to render compensation by cutting firewood.

In Germany, however, these are numerously established, there being in the entire empire in 1890, 1,957 such stations, which furnished during that year 972,490 dinners, 1,871,591 suppers, 1,936,091 lodgings, and 1,662,606 breakfasts. Of these stations, 1,707 were maintained by public authority, and 250 by societies. Labor exchanges or offices for facilitating the employment of labor were attached to 1,158 of the stations; 1,073 stations were attached to ordinary inns, and 841 were without arrangements for compulsory labor. In the single night, December 15-16, 1890, there were 9,216 guests within these stations.

The labor rendered by the guests when required is hardly sufficient to pay the expenses of their entertainment, but is largely of the nature of a "test" of good faith. The gross expenses of the stations for the year 1890 was 1,317,072 marks, and the receipts from the product of labor only 67,610 marks.

*Lodging Houses.*

Besides the relief stations the traveller in search of work may find shelter in the *Herbergen zur Heimat*. These are cheap lodging houses maintained largely by provincial or local societies, under the system promoted by the *Deutscher Herbergverein* or German Herberge Society.\* Some of these have relief stations attached. They are patronized by widely different classes, including vagrants and genuine workingmen. The accommodation also widely varies, being in some cases thoroughly comfortable, and in others poor. Professor Mavor considers the accommodation, as a rule, much superior to the Salvation Army shelters in London or to that provided by the municipality of Glasgow in their model lodging houses. The prices charged for food and lodging are, of course, quite small. The religious element enters into the conduct of these houses in the form of morning and evening prayers, attendance not being compulsory.

The relief stations and workingmen's lodging houses just described, taken in connection with the system of colonies, have an effect in legitimatizing the movements of a class which without them would become mere wandering vagrants. They enable an unemployed person to travel from place to place through the country, finding food and shelter at insignificant prices or in return for work, instead of begging subsistence from house to house. The labor exchanges at the relief stations have posted lists of situations vacant, and there are maps exposed at the stations indicating the locations of the various stations, lodging houses, and colonies throughout the empire. When exhausted by wandering from place to place, one may become a resident in a colony for such a length of time as is found agreeable, subject to the two-years' time limit. The whole system recognizes the tramp as a distinct class in the community, and apparently makes it easy for him to continue as a tramp. The effect of the establishment of the relief stations upon prosecutions for vagabondage in the Kingdom of Prussia is shown in the following table :

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\* This system is international. While the larger number of the houses, 410, are in Germany, the lists of the society include eight in Switzerland, four in Holland, three in Denmark, one in Russia, two in New York, and two in London.

YEARS.	Number of Stations	Number of Prosecutions for Vagabondage
1882, . . . . .	-	23,808
1883, . . . . .	-	20,833
1884, . . . . .	595	18,157
1885, . . . . .	915	15,727
1887, . . . . .	917	15,466
1890, . . . . .	951	8,605

It is seen from this table that there has been a marked decrease in the number of arrests since the establishment of the relief stations. It does not appear that the moral evil of vagabondage has shown a decrease corresponding to the decline in the number of prosecutions. It would rather seem merely a change of status that is involved. Vagabondage is now recognized and provided for by special facilities for its exercise within orderly channels, and largely at the expense of the public or of the charitably disposed. The tramp is provided for on the road, and while within the colony society is relieved of his presence; and so long as he chooses to remain he is rendered partly self-supporting. It does not appear that he is to any considerable extent reformed or brought into the regular channels of industry.

The relief stations and lodging houses also aid the industrially effective workman who for any reason may be seeking employment and forced to travel with limited means. The colonies are not often used by such workmen, nor do they seem to touch the evil of unemployment which at times affects men of this class.

#### HOLLAND.

The Dutch labor colonies differ from those in Germany in the essential principles under which they are conducted. They recognize the family and introduce the element of permanence. The first colony was founded in 1818 under the auspices of the Society of Beneficence. This society has a large number of branches throughout Holland, and its membership in 1893 aggregated 4,059. Each branch of the society subscribes to the fund for the maintenance of the colonies, which are not self-



supporting, and may recommend persons for entrance in proportion to the amount which they contribute. A considerable tract of heath land was purchased for the operations of the colony and additional estates added from time to time. In 1827 the different departments occupied 8,433 acres in all, and the population of the colonies numbered 6,751, including officials. Besides the land thus under cultivation the society controlled 5,000 additional acres. The two important departments of work include beggar colonies and free colonies, beggar colonies being penal rather than reformatory. These colonies were administered by the society until 1859, and were then taken under government control.

“Free Colonies,” says Professor Mavor, “were conducted upon a different principle. The colonists were from the beginning, and are now, not peasant proprietors but rather peasant life-renters. The distinction between the free colonist and a farmer working under the ordinary conditions of tenant farming lies simply in the circumstance that the free farmer is entitled to rely upon the society to make up any deficiency in his maintenance, whereas the tenant farmer has no such resource.” The colonists are divided into two classes, free farmers and laborers. The free farmers are given small holdings of land upon practically a life tenure. The tenant pays an annual rental due in January of each year to the society. Stock and seed are furnished by the society upon credit. In case of death, the widow of a tenant is permitted to continue the tenancy if she is competent to cultivate it, or if there is a member of her family who can do so. Inheritance of the tenancy is sometimes permitted to daughters under like conditions. Each farm consists of about  $6\frac{1}{2}$  acres. For misconduct a farmer may be dismissed, and in any event he holds no legal right in his tenancy and is not entitled to compensation for improvements which he may make upon the property.

The colonists who are classed as laborers enter the colonies upon recommendation of the charitable associations in the cities. If they are physically incapable, or unable to work, they are partly supported by the society which recommends their admission. They are housed in separate cottages, each having its little garden, and so far as able, together with members of



their families, work upon the colony farms, and are paid a limited wage. A few opportunities for the admission of laborers occur every year as those already in the colonies may be promoted to the rank of free farmers if there are vacancies, and if they are worthy of promotion, as measured by their conduct. The children of the laborers and free farmers are educated under a compulsory system, elementary schools being maintained at the expense of the Government, as described hereafter in an account of the colony at Willemsoord. Most of those who enter the colonies are unskilled laborers from the cities, although a few workmen of the mechanical trades, and some who have received a professional training, are found among them. Under the provisions of the Poor Law, orphans and children of paupers are sent to the colonies, and after admission are boarded in the families of the free farmers and laborers. The expense of their maintenance is borne by the authorities or by the charitable societies. The income derived from these boarders helps those with whom they board to get through the year without debt. It has been found that after a child has attained the age of eight years, it is difficult to deal with him in the colonies, and those between the ages of four and eight years are preferred.

The total population of the Dutch labor colonies during the year 1892 was 1,863; the number of births in that year was 45; the number of new families who entered the colonies, eight; the number of deaths, 16; the number of young persons who were provided with situations, 65; the number of free farmers, 214; the number of laborers, 91; and the number of boarders, 198. Two laborers were promoted to the position of free farmers during the year. In this year also, two laborers were imprisoned for stealing, and six free farmers and three laborers were dismissed for laziness. Professor Mavor states that, on an average, one free farmer or one laborer absconds every year.

The average age of those who enter is 40 years. A colonist may remain during life unless expelled for misbehavior. Children of colonists are provided with situations outside when of sufficient age.

Professor Mavor in his report gives the following account of the colony at Willemsoord:

On the colony at Willemsoord there are three colony farms; these are worked by 22 families, consisting in all of 100 persons.

The following industries are carried on in the colonies: mat making, blacksmithing, tailoring, carpentry, bricklaying, basket making, and furniture making, and the colonists are besides employed in horticulture, forestry, and agriculture.

Wages are paid by the piece in basket work and in furniture making. Three professional basket makers are employed.

The adult colonist is almost invariably regarded as a hopeless case. The efforts of the colony are directed mainly to the education of the children. Attendance at the day or evening school is compulsory. There are five elementary schools on the colony lands maintained at the expense of the Government, and, in addition, the colony has established a school of forestry, a school of agriculture, and a school of horticulture. In these institutions the children of colonists are trained and sent out at from 20 to 22 years of age to situations.

Nearly all the cottages of the laborers and free farmers were built about 70 years ago.\* They are neither better nor worse than cottages of the same age in the same district. . . . A free farmer has quite as large a stock of furniture and belongings as many peasants working for agricultural wages, and he lives at a very similar standard of comfort.

A range of houses is being built for old people, each couple or single person having a separate house. No rent is charged for these houses, and the old people make a portion of their living by cultivating the small plot attached to each house.

The colony is not established upon a religious basis, but there are three churches, one Catholic and two Protestant.

Professor Mavor also summarizes his opinion of the Dutch free colonies in comparison with the German labor colonies as follows:

The chief social importance of the Dutch free colonies lies in three features which distinguish them from the German labor colonies. These are: First, the element of permanence—the free farmers are there for life if they choose; second, the recognition of the family; and third, the education of the children.

The farmer and his family live together in one house, the children being taught letters and trained to useful employments. The advantages offered by these features to the colonists are very obvious.

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\* The population of the free colonies is to-day about the same as it was in 1827.

The objections to the Dutch system are two: First, the greatness of the cost in relation to the smallness of the number benefited; second, the danger of producing a class of workers who tend to become quite dependent—tend, indeed, to produce a permanent race of paupers. The large numbers in the farmers' families, and the tendency shown by the children to return to the colony after having left it, are important elements in the case.

Yet within the limits of the intention of the benevolent society, the Dutch colonies need not be regarded as failures. They secure healthy and industrious lives for a number of families, who, but for their presence in the colonies, might become recruits for the criminal or permanently indigent classes. Against the cost of the Dutch colonies, which is admittedly large in proportion to the number of families actually treated, must be set the hypothetical sum of the possible loss to society through depredations, poor relief, and charitable aid, were those who are now in the colonies left to prey upon society. There remains, however, the consideration that the Dutch colonies form really an endowed institution where a privileged few of the Dutch poor live in more or less comfortable circumstances at a cost of about \$115 per family per annum to the charitable societies of the country.

The Dutch system recognizes the family and accepts the responsibility of training the children and finding situations for them outside the colony when they grow up. The German system disregards the family wholly, except in so far as efforts are occasionally made by the directors of the colony to bring about family reconciliations. The Dutch system provides a permanent home for its colonists; the German system is intended to be a temporary mode of relief. The German system is almost ostentatiously a religious system, the Dutch system lays no stress upon the religious element. The promoters of the German system are optimistic enough to hope that some proportion of those who resort to the colony can be reclaimed, and sent back to ordinary industrial life; those who are carrying on the Dutch system have no such hope, and devote themselves almost wholly to the education of the children.

Expensive and limited in its capacity as the Dutch system is when compared with the German, there can be no doubt of the greater grasp of the problem which its method discloses.

#### BELGIUM.

In Belgium, labor colonies exist which were founded in 1810. Without entering into the history of early experiments out of which the present system has been developed, it is sufficient to

say that at present the colonies occupy about 2,964 acres situated in the communes of Hoogstraeten, Merxplas, Ryckvorsel, and Wortel. The colony of Hoogstraeten is intended for the infirm or partially incapable; that at Merxplas is a penal colony for able-bodied beggars and vagrants. The colony at Wortel receives voluntary colonists, but only a very small number of this class are included. This colony, as well as that at Hoogstraeten, is intended for the benefit of the worthy poor. At Hoogstraeten the strictest discipline is maintained, and the colonists employed in agriculture and domestic industries. At the penal colony at Merxplas the men are worked in gangs under the supervision of an officer who is accompanied by a soldier with loaded musket. The industries are largely agricultural, although some of the men are employed in carpet making, cabinet making, mat making, portmanteau making, and in the manufacture of horse collars under contract to outside parties. At Wortel the work is largely agriculture and forestry.

In Belgium since November 27, 1891, tramps and beggars are sent to institutions called *Dépôts de Mendicité* and *Maisons de Refuge*, these being the statutory names of the colonies to which we have referred. The law implies that all individuals found in a state of vagabondage or begging are to be arrested and taken before the police. If aliens, they are to be conducted to the frontier. The latter provision, however, is not strictly enforced. The result is that these colonies do not deal with the unemployed except of the vagrant or tramp class, the number of voluntary admissions being very small. Under a prior statute, passed in 1866, the colonies were empowered to receive those who voluntarily resorted to them. For instance, workmen out of employment were admitted under authorization from their local authorities, the expense of their maintenance being borne by the communes to which they belonged. The discipline within the colony was quite rigid, however, and departure from the colony was not freely permitted. The number of voluntary entrances to such of the colonies as receive them has constantly declined. This is largely due no doubt to the combination of the free and voluntary element in the same colonies. Since 1891 only the Wortel Colony receives voluntary colonists. As has been found elsewhere the mingling of what may be termed the worthy and unworthy classes in the same

colony has tended to the use of the colony for the latter class almost exclusively.

Concerning the Belgian institutions Professor Mavor remarks :

They seem to me to be simply punitive. The men remain there for a term of years under strict discipline, and in a position in which they are as nearly as possible prevented from doing any harm to themselves or society ; but when they emerge, their record precludes their being employed in ordinary industry and they again fall into the hands of the police to be sent back to the colony to harder work and a longer term of imprisonment than before.

#### FRANCE, AUSTRIA, AND SWITZERLAND.

The labor colony at La Chalmelle in the Department Marne, France, was founded in 1892. Its foundation is due to M. Georges Berry who had presented a report upon the German and Dutch colonies to the Paris Municipal Council.

The farm consists of 316 acres, the land being leased by the city of Paris to the municipal branch which has charge directly of the details of the work. The colonists are paid wages at the rate of 50 centimes per day and are supplied with clothes free upon entrance, subsequent necessities being charged to the colonists. The working day is ten hours long, the programme being as follows: 4-5 A.M., Coffee, light meal. 5-10 A.M., Work. 10 A.M., Breakfast. 10.30 A.M.-1.30 P.M., Rest. 1.30-2 P.M., Lunch. 2-7 P.M., Work. 7 P.M., Dinner.

The early meal consists of cheese, bread, and cider; the breakfast of lard soup, vegetables, and cider; the lunch of salad, cheese, and cider; and the dinner of soup, vegetables, and cider. On Wednesdays and Sundays meat soup is provided for the dinner and about a quart of cider is furnished per day. The colonists are admitted by a process of selection from those recommended by the directors of the night refuges in Paris. In making their selection the directors base their opinion upon the willingness to work of those whom they shelter and their previous antecedents. This necessity for selection has been regretted by M. Berry who would prefer to make the colony free, but it was thought that selection was essential to prevent the colony becoming the resort of the professional vagabonds, and besides this the number of places within the colony

is limited. Between the foundation of the colony in January, 1892, and the month of August in the following year, 106 persons entered the colony, 27 of whom were day laborers, 16 agricultural laborers, and 17 gardeners, the others being of various trades. Of these persons, 37 left of their own wish, 5 were expelled for disobedience and misconduct, 36 were placed in situations by the colony, and the remainder were in the colony on the 16th of August, 1893.

In carrying on the colony certain disciplinary measures are observed, varying in degree from reprimand to retention of salary, detention in the farm on Sundays, and in extreme cases to dismissal. Professor Mavor in his report states :

The type of men in this colony is on the whole superior to that of the German colonies. Here there are no ex-convicts. The causes of resort to the colony, unless the authorities take too lenient a view, are quite different from those which send the German colonist to his colonies. Family misfortune, disgust with the life of Paris, and similar causes are given. The men, however, are picked, and both in Paris and in the colony are the objects of individual care. Theoretically, at all events, much attention is paid to individual needs and peculiarities.

He points out that it is as yet too soon to judge of the results of a colony under the picked colonist system as carried on at La Chalmelle, and besides the fact that the colony has been in operation but a short time the numbers are quite too insignificant to offer much foundation for definite conclusions.

In Austria the relief station has been adopted, and it is stated by Professor Mavor that "it is alleged that in the provinces where relief stations have been established there has been a diminution of vagrancy. . . . The relief stations also serve as employment agencies, in so far as they exhibit notices of places at which workmen are wanted."

In Switzerland there is an institution (*Tannenhof Arbeiterheim*) a sort of workman's home, carried on by an incorporated society, its aim being to provide a temporary home for those in search of work as well as for unemployed persons discharged from the prisons of Berne, the board, lodging, and wages being provided in return for agricultural labor until permanent work

is secured elsewhere. The funds of the society consist of members' shares, gifts, and legacies which are intended to be capitalized. It depends for its revenue upon profits from agriculture, private contributions, contributions from the state, public bodies, and corporations, and legacies not intended to be capitalized.

The *Herberge zur Heimat* or *L'auberge de famille* has been developed in Switzerland. The Herbergen have a restaurant attached and afford accommodation for two classes; first, professional persons and commercial travellers, and, second, workmen in various employments.

Relief stations are also in existence in Switzerland and the question of whether they should be established as state institutions has been much discussed.

#### ENGLAND.

The labor colony system has not been tried to any great extent outside of Germany and Holland. The Salvation Army conducts as part of its work such a colony at Hadleigh in England, acquiring freehold estate for that purpose including about 1,500 acres of land besides other acreage at present covered by the waters of the Thames. Upon this tract the colony was established in 1891. The method of operation and the experience so far acquired have been fully described in the publications of the Salvation Army, especially in the work entitled, "Darkest England Social Scheme." The administrative officer of the colony is known as its governor. Matters relating to expenditure are directed by an expenditure board. The colonists are selected from the persons who have been inmates of the leading shelters of the army and who sign an agreement to "obey all the rules and regulations made for the good conduct and management of the colony, and to carry out all the instructions which may be given me by my officers there." They also promise to abstain from the use of intoxicating drink while in the colony and not to enter premises where liquor is sold and to discourage others from doing so. This rule relative to drink is strictly enforced, any departure from it being followed by instant dismissal. The colony is intended for those who cannot obtain occupation elsewhere and who are prepared to work without wages for mere shelter and



maintenance. In lieu of wages, grants are made to encourage good workmen, not usually, however, until after the first month's residence. These grants are made upon the recommendation of the superintendent of the particular department in which the colonist is working subject to the discretion of the Governor. The colonists undergo certain tests to determine their special fitness for particular positions, but if they have had special training they may be placed at once in positions for which they are fitted without waiting for the period of trial. Colonists are supplied with clothes and other necessary articles, and payment for the same is expected from whatever grants are made in lieu of wages. Only one-third of the grant can be drawn in cash, the balance being left as a reserve fund where the colonist owes nothing for clothes or articles supplied. Colonists are provided with cards showing at the end of each week the amount of reserve to which they are entitled. A portion or the whole of the weekly grant may be withheld by the order of the Governor for infringement of rules or negligence in respect to work, while for more serious misconduct colonists may be reduced to a lower class of grant or be discharged from the colony.

Colonists desiring to leave must give at least twenty-four hours' notice in writing and obtain a discharge notice, stating that work and tools are left in satisfactory condition. Failure to comply with this regulation works forfeiture of the amount of cash standing to the credit of the colonist in the reserve fund. Certain industries have been undertaken in the colony beside farm work. The most important is brickmaking. There is a tendency to engage in industries rather than in farm work, this sort of labor being found more congenial. The following table shows the distribution of labor in June, 1893 :

EMPLOYMENT.	Paid Labor	Colonists
Farm, . . . . .	13	13
Market garden, . . . . .	4	35
Nursery, . . . . .	1	1
Brick-fields, . . . . .	11	106
Dust (including labor at wharf and embankments, etc.), .	7	25
Saw mill, . . . . .	3	20
Blacksmith, . . . . .	1	1
Bootmaking, . . . . .	-	3



EMPLOYMENT.	Paid Labor	Colonists
Bricklaying, . . . . .	1	1
Chairmaking, . . . . .	2	2
Laundry, . . . . .	-	4
Butcher, . . . . .	1	1
Baker, . . . . .	2	-
Warehouse, . . . . .	-	2
Barber, . . . . .	1	1
Miscellaneous (including home department, stores, hospital, refreshment room, Hadleigh Hall, etc.), . . . . .	8	26
TOTALS (excluding management), . . . . .	55	241

Most of the persons who have been admitted to the colony are in the prime of life. Adult men only are admitted as a rule. Most of these are said to be single, but in any event the family is disregarded in dealing with the colonists. Colonists do not show a disposition to remain in the colony, more than half the total number admitted leaving the farm within three months; while only 47 out of a total of 991 remained over a year. Nearly one-half the total number, or 440, got work of their own accord or were restored to friends or found situations through the Salvation Army. Of the others, 213 left without notice, 73 were dismissed for drunkenness and 64 for other misconduct, 43 left through illness, 9 emigrated, and 145 left for other causes.

Like other schemes for reformatory work under the patronage of the Salvation Army, the religious influence of the colony is expected to exert a reformatory effect upon those who enter it. The colony itself forms only a single branch of the work of the army and is intended to co-operate with other features in its general plan of work. It cannot, therefore, be considered apart from these features, and indeed has been in operation so short a time that its effect can scarcely be estimated.

#### NEW ZEALAND.

In New Zealand the question of the establishment of state farms has been considered. The leading idea, as stated in the report of the Bureau of Industries for 1892, is to provide places of refuge and instruction for those persons who, not being able to succeed in getting employment in their own

trades and towns, may be encouraged to undertake work in the rural districts and be prepared to engage in it. The state farm is to comprise about 1,000 acres of land fit for agricultural purposes, and to this farm will be drafted the surplus workmen of the towns. The report states that many of the unemployed in New Zealand are "clerks, stewards, firemen, tailors, printers, etc., who, crowded out of their regular employments, are in a state of destitution; these being in addition to a large body of general laborers who though used to the pick and shovel have no knowledge of work upon a farm." It is thought that these could "assist in the general work of a farm and make its cultivation pay expenses, while, in the meantime, the workmen themselves were being trained to habits and duties fitting them for the general labor market." The programme involves a system of co-operative work, including the erection of cottages intended to accommodate colonists with their families, the idea being that the farms should serve as transit stations through which a steady current of labor, changed from non-effective to effective, should pass. The whole scheme is theoretical so far, and has not yet been reduced to practical demonstration, although land has been secured as an initial step.

#### FOREIGN CHARITY ORGANIZATION RELIEF WORK.

##### ENGLAND.

The following account of the relief work undertaken by the London Charity Organization Society is abridged from the report on "Methods and Agencies for Dealing with the Unemployed:"

"It may be said to be the general policy of the Society not to relieve ordinary cases of want of employment, such as continually arise from one cause or another in a normal state of the labor market. It is held that the proper and only effective 'cure' for a carpenter or dock laborer who has lost a place is to find another. To give him money might often tend to relax the energy with which he is searching for work; to provide him with work (even if practicable) would have the same effect in still greater degree, beside tending to dislocate the labor market. As regards helping him to find work, the Society holds as a general rule that the search for work is usually most

effectively carried on by the person most interested in its success. This argument applies obviously only to the normal fringe of 'unemployed,' who at any given time, even in a favorable state of the labor market, find themselves out of a place, and is admittedly inapplicable to times of unforeseen and exceptional scarcity of work. It is based on the assumption that, at the time, there is on the whole a sufficient supply of work to go round, so that any action which relaxes the energy with which a given workman seeks his share of that employment is undesirable. The argument fails when, owing to exceptional circumstances, there is not enough work to go round. Accordingly the Charity Organization Society draws a sharp distinction between 'ordinary' and 'exceptional' distress, especially as regards want of employment.

"Before, however, passing on to the policy pursued in cases of 'exceptional' scarcity of work, it should be noticed that the line taken by the various societies and district committees with regard to providing labor, relieving the unemployed, and assisting them to obtain work, is by no means uniform throughout the country. In Scotland, for example, where the Poor Law does not contemplate the relief of the able-bodied, the division of function between private effort and the Poor Law inculcated above might naturally be interpreted as leaving the provision of labor yards as tests for able-bodied applicants for relief within the sphere of the voluntary society. Thus the Glasgow Charity Organization Society and the Associations for Improving the Condition of the Poor at Edinburgh and Paisley provide wood-chopping yards for men and sewing for women.

"In Edinburgh the labor yard is used 'both as a means of giving temporary employment and as a test of willingness to work.' The men work from six to seven hours a day, payment being by the piece, with a minimum of 1s. a day and dinner, and additional 'help, if needed, for his wife and family.' During the year 1892, 1,158 persons were offered work in the yard, which was accepted by about 75 per cent. In Glasgow (1891-92) work in the wood-chopping yard was offered to 318 men and accepted by 257. Payment is by results, with an average of 1s. 3d. per day of 7½ hours. There were 68 women employed in making up clothing, which

was sold to the public. At Paisley the men in the wood-chopping yard can earn 1s. a day. Employment was found in it for 36 men during the year.

“A few English Charity Organization Societies, especially in the North, also provide work. In Newcastle (1891-92) work in the firewood yard was offered to 509 and accepted by 202, while a ladies' committee found charring for 67 women and gave needlework to 39. The firewood and clothing were sold at the office.

“The Darlington Charity Organization Society opened a woodyard towards the close of the year 1891; and a boys' ‘Messenger Brigade,’ which was started in 1890, is also under their control. The cost of the two institutions for the year 1891-92 was £345.

“In 1891-92, the Liverpool Central Relief and Charity Organization Society gave 776 orders ‘to men alleging want of work as a reason for seeking relief’ to work in the wood-chopping workshops. Only 288 accepted work. They earned an average of 1s. 8d. a day, additional relief being given, if necessary, to the family. The deficiency for the year was £266. The society has also a workroom for women. It regards these workshops as indispensable as a test in a district where casual laborers form so large a proportion of applicants.\*

“The Rochdale Charity Organization Society also has a firewood factory in which 33 persons were employed during 1891-92.

“The London Society, however, distrusts the provision of work by voluntary agencies, even as a test, in ordinary times. ‘Our objection to the use of labor tests is that they tend to become a substitute for inquiry and for the individual treatment of cases. . . . Tests are for the Poor Law, which has only to prove the fact of destitution. Those who would help must go deeper.’”†

Turning from the provision of employment to the work of assisting persons to obtain employment, it is stated in the last report of the London Charity Organization Society that out of

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\* Report of Liverpool Central Relief and Charity Organization Society, 1891-92, pp. 7 and 8.

† Register of Charity Organization and Relief Societies, 1890-91. Introduction, pp. vii and viii.

12,040 cases relieved during 1891-92, 670 were relieved by employment. The general policy of relief is stated in the following extract :

‘ It has now been repeatedly proved that the only way to meet wide-spread and exceptional distress, without doing permanent injury to the mass of the poor, is to adhere to certain general principles and fixed lines of action which they will readily understand. Indecision and vacillation at such a time produce grave mischief.\*

“ The creation of a large relief fund tends to occasion additional difficulties and perplexities. Confusion and waste can only be avoided by taking careful measures for the administration of relief beforehand, quietly and without panic.

“ To deal with large numbers of people quickly and effectually ‘ tests ’ are necessary, no less than inquiry.

“ Roughly speaking, applications come from three classes :

1. Thrifty and careful men.
2. Men of different grades of respectability, with a decent home.
3. The idle, loafing class, or those brought low by drink or vice.

“ To the first of these relief should be given ; but if public works are opened they should be recommended to take such work, not as a test, but as temporary employment.

“ To the second class (according to the character of the case) relief should be offered (1) conditionally on employment in public or other works ; or (2) the applicant should be referred to the Poor Law labor yard ; or (3) admitted to the workhouse, while the wife and family are supported by charitable relief outside.

“ The third class should be left to the Poor Law. Relief by way of alms only maintains them in their evil habits, discourages the thrifty and striving, and leads to still further neglect of wife and family.

“ Public works should not be undertaken unless there is clear evidence that the want of employment is so great that some

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\* In a time of “ commercial embarrassment ” “ an ill-regulated distribution of charitable donations may not only fail to relieve the class for whose benefit the funds were collected, but further diminish the resources they would otherwise have obtained by their own exertions. ” — Dr. Kay, Third Annual Report of the Poor Law Commissioners.

such temporary measures are absolutely necessary to prevent better-class workingmen from living in semi-starvation. Their tendency must be to keep labor in the same grooves. If the distress is occasioned by some temporary and definite cause, after a short period there will be an improvement in the labor market. If the distress is occasioned by deeper and more permanent causes, public works will act merely as a palliative which may divert attention from the source of the evil and tend to become as chronic as the shortness of work.

“If public or other works are opened —

1. Men should only be admitted to them after inquiry or on satisfactory recommendation.

2. The wages and the hours should be as nearly as possible according to contract rates.

3. Care should be taken to supply sufficient overlookers, and to group the men according to character and ability.

4. If a meal is wanted, or clothing, it is better that this should be supplied separately from a relief fund. The employment should be given, as far as possible, in accordance with ordinary business contracts, and not as ‘charity work,’ which tends to be as ill-done as it is ill-paid, and to degrade men instead of improving them.

5. Public and other relief works should be of a local character, planned according to estimates drawn by the local authorities, and conducted under local superintendence. This will be some guarantee against waste and irresponsibility. Such works only should be undertaken as are likely to create the least disturbance in the labor market.

“Poor Law labor yards are sometimes the only test available, but they have a tendency to become permanent institutions for the supply of cheaply-paid and practically useless labor to casual and idle laborers of all kinds.”

#### **FREE INTELLIGENCE OFFICES.**

Free intelligence offices, or registration offices under state or municipal control, by means of which the employing class and those seeking employment may be put into communication with one another, are earnestly advocated by many as a step toward relieving the distress caused by constantly recurring periods of unemployment.

Such offices, either wholly or partly under state, municipal, or parish support, exist in England, France, Germany, and, in this country, in the State of Ohio; and their establishment in Massachusetts has been under discussion.

It therefore seems wise to present the fullest possible account of their methods of operation and practical results elsewhere. The foreign data, which follow, are derived, as to England, from the report on "Methods and Agencies for Dealing with the Unemployed," and as to France, from the report on "Le Placement des Employés, Ouvriers et Domestiques, en France," both of which have been previously mentioned.

#### ENGLAND.

##### *Detailed Descriptions.*

"The first office of this kind to be established in England (at least, among those still in existence) was that at *Egham*, which was opened in February, 1885. The bureau is managed by the local Superintendent of Births, Deaths, and Marriages, who gives his service gratuitously.

"The registry is made known by cards posted about the district, and by advertisement in the country papers. It is open to local residents, but others may apply, and if a vacancy occurs for which a local man is not available an outsider may be sent. The bureau is open daily from 9 A.M. to 7 P.M. The following are the heads of information entered in the register:

Name\_\_\_\_\_

Address\_\_\_\_\_

Date\_\_\_\_\_

Description of occupation required\_\_\_\_\_

Where last employed\_\_\_\_\_

How long employed\_\_\_\_\_

Applicant's remarks\_\_\_\_\_

Date when employment is found and by whom\_\_\_\_\_

"The registrar only enters the names of those whom he considers *bonâ fide* workmen out of employment, and as he is acquainted with most persons in the district, formal inquiries are hardly necessary. The local loafers are pretty well known to him, and they do not now apply for registration.



“No charge is made for registration, but ‘all who may obtain engagements through its agency are invited to contribute, if possible, threepence per week during the first few weeks of their engagement, but this contribution is entirely voluntary.’ The initial rule of the registry is ‘that the registrar shall scrupulously abstain from interference in any question of wages or conditions of service, or labor troubles.’

“Following this rule the registrar declines to supply men to fill the places of men on strike, and no record is made as to membership of a trade union or wages previously received or required.

“Postcards are issued to employers and men for them to notify when they are suited, and a fair proportion of these cards are filled up and returned.

“As is natural in a country district, the bulk of those for whom situations are found are gardeners, laborers, grooms, and members of the building trades. Besides the work of finding situations, loans are granted in special cases to redeem tools out of pawn, or to take families to other districts. About 75 per cent of the money so advanced is repaid.

“In the fourth annual report of the registry the opinion is given that in such bureaus ‘the antecedents of applicants who may be personally unknown to the registrar’ should be authenticated ‘if it is intended not merely to report a total of all persons desirous of registering themselves as wanting work, but also to attract offers of employment.’

“The success of the Registry seems very largely due to the fact that the superintendent knows personally most of those who are likely to apply, whether employers or workmen; a condition of things possible in a country district, but not in a large town.

“The *Ipswich* Bureau was opened in October, 1885, only a few months after that at Egham. The forms and registers used are more elaborate than those at Egham. The principal forms and methods of procedure are thus described in a recent account of the bureau published by the honorary manager:

Our method of working is as follows: When a man applies to us for work, he is given a form, of which the following is a copy:



No. \_\_\_\_\_

**IPSWICH LABOR BUREAU.**

Established for the purpose of finding work for men, and securing suitable men for employers. No fees are charged, but donations to defray working expenses are solicited.

Office: Tower Street. Office Hours: 9 to 5.

Dated \_\_\_\_\_ 189

**APPLICATION FOR WORK.**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Age \_\_\_\_\_  
Married or Single \_\_\_\_\_  
What Family \_\_\_\_\_  
Trade (describe fully) \_\_\_\_\_  
Name and Address of last Employer \_\_\_\_\_  
How long in his employ \_\_\_\_\_  
Average Wages \_\_\_\_\_  
Cause of Leaving \_\_\_\_\_

**CERTIFICATE OF CHARACTER TO BE SIGNED BY LAST EMPLOYER.**

I certify that \_\_\_\_\_ is a competent workman, that he was in \_\_\_\_\_ employ as stated above, and that his character and conduct were satisfactory.

Signed \_\_\_\_\_

If the above is filled up and signed by the last employer to our satisfaction, the man is registered.

**COPY OF MEN'S REGISTER.**

No.	Date.	Name.	Address.	Occupation.	Age.	Married or Single.	How many Children.	Name of last Employer and reference.	Wages.	How disposed of.

If there is an order on the books to suit him, and if the place is near enough to admit of it, we send him to it; but if it is at too great a distance, we send particulars of the man to the employer who has sent us the order, and if he thinks him suitable, he goes. If we have no opening for him, we look up advertisements in the daily papers, and if anything likely is discovered, we send on to the advertiser the following form:

## LABOR BUREAU, IPSWICH.

A Medium for Masters who want Men, and Men who are seeking Employment.

No Fees. Offices: Tower Street.

Telegraphic Address: "LABOR BUREAU, IPSWICH."

*Honorary Superintendent:* \_\_\_\_\_

## WANTS EMPLOYMENT.

Name \_\_\_\_\_ Address \_\_\_\_\_

Age \_\_\_\_\_ Married or Single \_\_\_\_\_

Trade \_\_\_\_\_

Last Employer \_\_\_\_\_

Having satisfied ourselves that the above is a competent workman, and of good character, we shall be glad if you can find him employment.

We also advertise daily in the local papers such men as we have on hand.

## ORDERS FOR MEN.

When masters apply to us for men, their orders are entered in a book, of which the following is a sample :

Date.	Name.	Address.	Occupation.	Man sent.	No. of Register.	Date.	Result.

If there is a man on the register likely to suit, particulars of him are sent. If not, we do our best to get one.

## INDEX BOOKS.

To facilitate reference we have an index to names and trades.

INDEX OF NAMES.			TRADES INDEX.		
Name.	No.	Remarks.	Name.	No.	Remarks.

“The bulk of those for whom situations are found are laborers, porters, grooms, gardeners, and errand boys, which together make up over 70 per cent of the total number for whom situations were found during the year 1891-92. During the previous

year a still greater proportion, nearly 80 per cent, of those placed in situations, belonged to these classes. The management of the bureau is entirely in the hands of the honorary manager, but he is desirous that it should be taken over by the Municipality, and that similar institutions should be established in all large towns and federated together so as to 'facilitate the circulation of labor.' Registration is free, and the expenses of the bureau which amounted to £98 11s. 3d. during the year 1891-92 are met by voluntary subscriptions. The bureau is confined to men and lads and claims to be neutral in trade disputes. The success of the bureau in placing applicants seems to spring largely from the energy expended by the manager in finding situations for workmen, and workmen for employers. He does not merely register applications and wait for corresponding offers, but actively exerts himself to find suitable employers or workmen as the case may be.

"At *Wolverhampton*, the centre of a manufacturing district, very different in character from that surrounding *Ipswich*, a labor bureau was established by a voluntary Committee in December, 1892. The bureau was connected with a relief organization formed to deal with the distress prevailing in the town through scarcity of employment. At first all applicants were registered and 763 names were entered, of whom 294 belonged to various branches of the metal trades. The labor bureau, however, was hardly used at all by employers so long as it was connected with the relief organization, and up to the time of the first report of the committee only six temporary situations had been obtained in addition to the work provided directly in the way of relief. The report states that 'it seems almost impossible that while there is any suggestion of relief employers can be made to believe that any men are to be found except the submerged tenth who are practically useless to them.' A special sub-committee was therefore appointed to manage the bureau, which decided 'that only those applicants should be placed upon the register who could show that their being out of employment was due to no fault of their own.' For this purpose detailed inquiry forms were drawn up, which had to be filled up by the applicant and countersigned by his last employer. The result, however, was to rouse some opposition among Trade Unionists who regarded the inquiries from the last employer as

an attempt to reintroduce the 'discharge note' system. Practically the bureau is closed. Employers have not used it, and not more than 20 applicants have been placed in situations through its agency.

"At *Salford* the labor bureau, like that of *Wolverhampton*, came into existence during the winter of 1892 as an effort to relieve distress caused by the scarcity of employment. For two or three weeks registration was carried on by a private committee in three wards of the borough, and 273 persons registered; afterwards a special committee of the Corporation was appointed on December 7, 1892, to inquire into the extent of distress and to make proposals for its relief. With a view to make this inquiry complete the sub-committee opened a register for the unemployed in the borough. The following particulars were registered: name, address, occupation, usual wages, length of residence in borough, where last employed, how long, married or single, number of children, and physical condition.

"One of the most important labor bureaus under the control of a London Vestry is that at *Chelsea*, which was founded in October, 1891. The bureau is managed by a committee of the vestry, employing a superintendent and a lad. It is open daily from 9 to 12 for men and from 1 to 5 for women, except on Saturdays. Applicants must be resident in the parish, and must fill in a form indicating name, address, character of employment required, where last employed, and how long out of employment. Registration is free, and applicants must apply for renewal every seventh day if still unemployed. The superintendent exercises his discretion to a certain extent in selecting persons from among those registered to send employers. He has a general instruction from the Committee to work in harmony with trade organizations, but the vestry have not officially laid down the principle that men are not to be sent to take the place of strikers.

"The bureau has no permanent connection with any scheme of relief, though last winter, by arrangement with the surveyor to the vestry, tickets were issued to the men on the register, giving preference for employment in clearing the roads of snow. The superintendent presents a monthly report to the vestry on the work of the bureau.

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“Several other vestries have copied the forms in use at the Chelsea Bureau, with more or less modification, when starting permanent or temporary registries in their districts. Some of the principal forms are therefore presented here. It should be stated that in practice Form No. 3 is seldom returned to the office.

**FORM 1.**

No. \_\_\_\_\_

**CHELSEA LABOR BUREAU.**

TOWN HALL, KING'S ROAD, CHELSEA, S. W.

Date \_\_\_\_\_ 189

Full Name \_\_\_\_\_

Full Address \_\_\_\_\_

Description of Employment required \_\_\_\_\_

Where last employed \_\_\_\_\_

How long employed \_\_\_\_\_

Any remarks applicant may desire to make \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**FORM 2.**

No. \_\_\_\_\_

**CHELSEA LABOR BUREAU.**

TOWN HALL, KING'S ROAD, CHELSEA, S. W.

Date \_\_\_\_\_ 189

Sir :

I am pleased to inform you that I have obtained employment at \_\_\_\_\_

\_\_\_\_\_

Here state name and address of employer and where employed.

and desire to have my name erased from the list of applicants for employment.

(Signed),

\_\_\_\_\_

Here write name.

**NOTE.**— This form must, when filled up, be delivered at the Bureau as soon as possible after obtaining employment.

Keep this clean.

\_\_\_\_\_

*Superintendent.*

FORM 3.

**LABOR BUREAU.**  
TOWN HALL, CHELSEA, S. W.

\_\_\_\_\_189

On the \_\_\_\_\_ day of \_\_\_\_\_ I sent you \_\_\_\_\_ in compliance with your wish. Will you kindly fill up the form at the foot, and return it to me at your earliest convenience?

I am, \_\_\_\_\_, your obedient Servant,

\_\_\_\_\_*Superintendent.*

Mr. \_\_\_\_\_.

**REPLY.**

I am \* \_\_\_\_\_suited [and the person you sent is still in my service.]

Signature\_\_\_\_\_.

Date\_\_\_\_\_.

\* Insert "not" if such be the case, and strike out the words in brackets.

"During the year, January 1st, 1892, to December 31st, 1892, 3,402 names were registered, and employment (either temporary or permanent) was found for 1,649, of whom 668 were domestic servants, 290 charwomen, 150 boys, 121 laborers, while the remaining 420 men and women belonged to various trades and industries. The expenditure of the bureau for the first year, October 1891 to October 1892, was £180 12s. 7d., the bureau being accommodated rent free in the vestry offices.

"Most of the other existing labor bureaus conducted by the London vestries and local boards had their origin in the temporary registries for the unemployed started in the winter of 1892 in various districts. Some of these registries have since been discontinued (as at Lambeth and elsewhere), others though still nominally open are for the time practically closed (as at Westminster, the Strand, etc.); a few have been worked continuously as labor bureaus, and may be considered as permanent institutions.

"Of the latter the most important are the bureaus at St. Pancras, Battersea, and Camberwell.

"The *St. Pancras* Bureau was started in January 1893, and from its establishment up to August 31st, registered 3,297 applicants, for 446 of whom it found employment. At the

beginning 20 branch offices were opened, but the amount of use made of these offices decreased after a time, and the whole work of the bureau is now centralized in one office.

“The forms of letters to employers are substantially the same as those in use at Chelsea.

“Applicants are required to renew their applications once a fortnight until they obtain work, and are asked to report the fact as soon as they find work for themselves, but the first report of the bureau states that these rules are not strictly complied with. The particulars filled in on the application forms are not as a rule subjected to verification by inquiry. With regard to the question of recommendation . . . . . the Superintendent in her report to the vestry states that:

The question of recommendation is a serious one, and has had to be dealt with very gently; we do not take responsibility in any way, but we have found it desirable, in the interests of the applicants, to invite them to furnish such particulars as will enable employers to make inquiries as to character and suitability. Some working men urge that their character has nothing to do with their quality as workmen and their claim to employment. No doubt, from their point of view, there is some justification for the argument, but I am glad to say that few applicants have persisted in their view when it is pointed out to them how an employer may be equally right in taking the opposite view.

“Care is said to be taken not to interfere with questions of wages to be received, the work of the bureau being considered to consist simply in registering the names of workmen and employers. The cost of the bureau for the first three months (when the branch offices were open) was £98 5s. 11d. inclusive of printing, with no charge for rent. As now worked the cost is stated by the superintendent to be about £2 a week.

“The *Battersea* Bureau is conducted in premises provided by the vestry, by which it is maintained. It was opened in December 1892, and during the succeeding six months the names of 1,948 men and boys, and 367 women were registered, and 447 men and boys and 122 women have been placed in situations, either permanent or temporary. Of these 24 men were employed by the vestry surveyor, and 10 by the Commissioners of Baths and

Washhouses. The forms used, the hours during which the bureau is open, and the general lines on which it is conducted, are substantially the same as at Chelsea. The cost for the first six months, including the expense of fitting up the office, is stated to have been £106 6s. 3d.

“At *Camberwell* a labor bureau was established by the vestry on December 19th, 1892, first for men and on December 30th, for men and women. The forms used are nearly identical with those used at Chelsea. The bureau occupies a special building containing two rooms erected by the vestry at the rear of the vestry hall, and is managed by a committee of the vestry. When a workman is supplied to an employer, both parties are informed that not less than trade union rates of wages should be given or accepted. The employers who chiefly use the bureau are shopkeepers and small manufacturers. There is a good demand for domestic servants, but not many applicants for situations. As at Chelsea, St. Pancras, and elsewhere, very few employers return the forms asking whether they are suited or not. The rule is to keep applicants on the register for seven days, after which they must renew their application if necessary.

“The Superintendent has visited the chief local employers, and temporary work as sandwich men has been found for many men, who have been supplied with boards (borrowed for the purpose) and paid 2s. 6d. a day through the superintendent of the bureau.

“*Other Bureaus and Registries.*—The Labor Exchange, opened in February 1893 by the Strand district Board of Works registered 191 names up to May 15th, mostly of unskilled laborers. The only man for whom work was found was employed by the board. The office is now closed, but any persons still wishing to register can do so at the offices of the board.

“In Westminster an employment registry has been at work since March 6th, 1893, the Vestry of St. Margaret and St. John having voted £200 for the purpose. The number of persons registered up to June 15th, was 936, and employment found



for 25. Most of the applicants at this bureau are unskilled laborers, porters, carmen, boys, and charwomen.

“A labor bureau was established by the Vestry of St. Martin-in-the-Fields on November 17th, 1892, but with the exception of a few men employed temporarily by the surveyor, none of the 169 applicants have been placed in situations. The Chelsea forms are used, but there is no inquiry or classification.

“The temporary registries, which were open for a few months during the winter, need no description. None of them succeeded to any appreciable extent in obtaining private employment for those who registered their names, and such interest as they possess is mainly in connection with the supply of labor for public relief works.

“The expenditure of money out of the local rates for the purpose of maintaining labor bureaus has not passed without challenge even in the case of London vestries, the powers of which are in some ways less clearly limited than those of ordinary municipalities.”

#### FRANCE.

The plan of free intelligence offices, or offices for the registration of persons desiring employment maintained under state control, finds its fullest expression in France. The establishment of such offices seems to have resulted from the methods of dealing with persons out of employment which were adopted after the abolition of the Feudal System and which have finally developed into the institutions now existing.

Without entering at length into the history of the subject, it is sufficient to say that immediately after the abolition of the Feudal System it was customary for workmen to congregate in certain quarters of the city for the purpose of securing employment. These localities were afterwards legitimized under the name of *Places de Grève*. The idea of creating labor exchanges, or as they are termed in France, *Bourses du Travail*, is attributed to M. de Molinari who, in 1846, published a newspaper called the “*Courier Français*” in Paris, and who advocated the general establishment of such exchanges therein, but the first practical plan for such an exchange seems to have appeared in 1848, in which year a complete scheme of organization was presented to the Municipal Council of Paris.

Three years later, in February 1851, a proposal was submitted by M. Doucoux as follows :

ART. 1. — There shall be erected in Paris, under the direction of the State, a Labor Exchange

ART. 2. — This exchange, divided into sections for the different classes of trades, shall contain employment registries for workmen, and all information adapted for the purpose of enlightening the public as to the different phases of labor.

This bill, other details of which it is not necessary to quote, was considered exclusively communal in its character and for that reason was referred to the Municipal Council of Paris. Apparently nothing was done until 1875, when a proposal was submitted in Paris to establish a Labor Exchange or “at least a refuge enclosed and covered so as to shelter the numerous groups of workpeople who collect every morning for the purpose of being hired at the docks and other works.”

On the 18th of July, 1878, the Municipal Council of Paris authorized the construction of a permanent shelter in the Boulevard de la Chapelle. Agitation of the subject still went forward and on the 19th of November, 1883, M. Manier submitted to the Municipal Council of Paris the following resolution, adopted at a meeting held on the 16th of the same month at the Salle Rivot :

Considering that the Labor Exchange will at least have the effect of (a) suppressing the Places de Grève, (b) facilitating the placing of workers, (c) suppressing the Registry Offices, (d) centralizing the supply and demand with a view to rapidly bringing workers into relation with work, (e) establishing direct relations between the chambers of syndicates or corporate associations, as well as between all workers in general whether they belong to unions or not, the assembly, having heard the details of the proposal, invites the Municipal Council to vote the said proposal in its entirety in the present session.

The subject was afterwards discussed at length and various schemes were presented.

A general idea of the Labor Exchange is well summarized in the following paragraphs from the report presented in 1886 by M. Mesureur :

In adhering to the standpoint of liberty of contract, you have the right if not the duty to furnish labor with the means of maintaining a struggle against capital with equal and legal weapons; without the labor exchange, the existence of syndical chambers will always be precarious, the charges which they entail being prohibitive to the majority of workmen.

It is therefore necessary that they should have premises and offices to which every one may come without fear of having to sacrifice more time or money than he can afford; the free and permanent use of the meeting rooms will enable workers to discuss more fully and accurately the numerous questions which interest their trade or affect their wages; they will have for their guidance and instruction all means of information and correspondence, the resources furnished by statistics, a library with books on economy, industry and commerce, and the course of production in every industry, not only in France, but in the whole world.

Finally the Municipal Council of Paris decided to establish a central labor exchange which was opened on the 3d of February, 1887. Subsequently several provincial towns followed the example of Paris and labor exchanges increased in number from year to year. Some of the trade unions attached to the Paris Exchange refused, however, to comply with certain provisions of the law of 1884,\* and for that reason the General Council of the Exchange was dissolved.

During the year of 1891 the trade syndicates belonging to the Paris Exchange registered 37,142 applications for employment and placed permanently 29,429 persons. There were 2,814 persons placed temporarily. The whole number of trade syndicates acting as employment exchanges in France in 1891 was 3,253. These syndicates received during that year 147,818 applications for employment from persons desiring work, and 94,372 applications from employers for assistants. They found permanent places for 106,306 persons and placed 10,364 persons temporarily.

The free intelligence offices, or as they are sometimes called free municipal registries, in France are thus referred to in the report entitled "*Le Placement des Employés*," (page 569):

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\* This Statute granted to trade unions a right to organize without restriction under certain specific conditions.

The want of success attending the experiment made in carrying out the decree of the 8th March, 1848, by which the Provisional Government established a free information bureau in each of the *mairies* of Paris, for a long time discounted the idea of free municipal registry offices.

Some of the municipalities . . . revived this idea in 1886 in consequence of the agitation against the private registry offices, and, following their example, several other towns (besides Paris) have established free registry offices, or encourage private undertakings established with this object.\*

The following table shows the work of the free municipal registries in France during the year 1891:

DEPARTMENTS.	Towns	Date of Establishment of the Office	NUMBER OF YEARLY		
			Applica- tions	Offers	Situations Secured
Gironde, . . .	Bordeaux . . .	1888	3,161	784	696
Marne, . . .	Sainte-Ménéhould . . .	-	90	90	90
	Vitry-le-François . . .	-			
	Sézanne . . .	-			
Nord, . . .	Lille . . .	1884	1,248	194	-
	Cambrai . . .	1889	100	100	100
	Caudry . . .	1889	24	24	24
Orne, . . .	Fiers . . .	-	74	74	74
	La Ferté Macé . . .	-			
Seine, . . .	Paris				
	1st Arrondissement.	October, 1889	1,410	1,035	1,009
	2nd " . . .	April, 1891	975	295	150
	3rd " . . .	October, 1888	4,500	5,000	4,000
	4th " . . .	March, 1889	2,104	956	482
	5th " . . .	May, 1889	284	284	284
	6th " . . .	January, 1889	4,000	1,800	1,500
	13th " . . .	September, 1891	492	156	101
	14th " . . .	May, 1889	1,000	670	604
	15th " . . .	November, 1888	1,000	715	715
	18th " . . .	July, 1887	2,743	765	627
	Levallois-Perret . . .	October, 1883	1,600	400	400
TOTALS, . . .	-	-	24,805	13,292	10,856

The method of operation of these offices is described in the report as follows (pages 599-600),\* the particular office referred to being that in the 18th Arrondissement in Paris:

\* Translation from the report of the English Department of Labor.

The free municipal registry office of the 18th Arrondissement was founded on the 15th July, 1887. It is conducted with a subsidy of 2,000 francs from the municipal council. An accountant, who receives 60 francs per month, attends at the office every evening from 7 till half-past 9. A clerk carries the letters, the object of which is explained further on, and receives for this service 40 francs per month, bringing the expenses for staff to 1,200 francs.

A sum of 800 francs then remains for expenses of printing, postage, and advertising; the latter takes place by means of circulars, placards, newspaper reports, and notices left with tradespeople.

The two officials are placed under the exclusive supervision of a committee of control, consisting of the *maire* as president, some deputies, and five members of the *bureau de bienfaisance* (two governors and three commissaries); one of the officials registers the applications for work, and the other the applications for workpeople.

Registration of applications for work takes place on presentation of a document stating the address, together with certificates, work books and references of candidates; in addition, for the greater convenience of employers, a desk has been put up in the waiting room on which are placed printed forms which employers have only to fill up, and put into a box opened every evening.

Each evening, after the closing of the office, the accountant, following the order in which the applications for work have been registered, endeavors to meet the applications for workpeople and sends letters by the clerk to the parties interested, which serve them as introductions to employers.

The following table exhibits the operations of this office from July 15, 1887, to December 1, 1891:

YEARS.	Applica- tions for Employ- ment	Situa- tions Offered	SITUATIONS SECURED				
			Males	Appren- tices	Females	Appren- tices	Totals
From July 15, 1887, to Decem- ber 31, 1888, . . . . .	6,545	1,661	542	83	760	88	1,473
1889, . . . . .	2,993	654	195	23	312	4	534
1890, . . . . .	3,942	864	247	28	415	4	694
1891 (December not included),	2,743	765	180	37	404	6	627
TOTALS, . . . . .	16,223	3,944	1,164	171	1,891	102	3,328

A detailed statement as to the occupations of the persons who were placed in situations during the period covered by the foregoing table appears in the following presentation:

OCCUPATIONS.	From July 15, 1897, to Decem- ber 31, 1898	1899	1900	1901 (December not included)	Totals
<i>Males.</i>					
Accountants, . . . . .	2	1	-	1	4
Clerks, . . . . .	22	5	1	6	34
Clerks (for sheriffs and lawyers), . . . . .	2	-	-	-	2
Draughtsmen and calculators for architects, . . . . .	2	2	2	-	6
Office clerks (15 to 18 years of age), . . . . .	7	19	27	22	75
Professors (special branches), . . . . .	2	-	-	-	2
Employés in mercantile offices (16 years of age and over), . . . . .	43	31	40	24	143
Representatives (fixed salary), . . . . .	2	1	2	5	10
Commission brokers, . . . . .	224	8	12	9	253
Hotel porters, . . . . .	1	-	1	-	2
Employés in wine shops and saloons, . . . . .	49	16	18	25	108
Employés in coffee houses, . . . . .	4	-	-	-	4
Employés in laboratories, . . . . .	7	3	6	-	16
Employés on race tracks (16 years of age and over), . . . . .	29	13	22	22	86
Employés in warehouses, . . . . .	9	7	17	9	42
Employés in offices, . . . . .	2	-	1	-	3
Employés (grooms), . . . . .	2	5	5	7	19
Employés (grocers and fruit dealers), . . . . .	6	-	2	-	8
Employés (meat dealers and butchers), . . . . .	5	-	1	1	7
Employés (milk men), . . . . .	2	-	1	1	4
Employés (work shops), . . . . .	8	6	5	1	20
Employés (coal dealers), . . . . .	3	-	-	-	3
Clerks in hardware stores, . . . . .	-	-	1	-	1
Circular distributors, . . . . .	-	-	9	5	14
House porters, . . . . .	12	10	5	8	35
Night watchmen, . . . . .	-	3	-	-	3
Footmen, . . . . .	4	1	1	1	7
News dealers, . . . . .	1	-	-	1	2
Gardeners, . . . . .	2	-	1	1	4
Cooks, . . . . .	1	-	-	-	1
Coachmen, . . . . .	2	10	6	6	24
Cart drivers, . . . . .	6	-	8	4	18
Laborers, . . . . .	22	3	3	2	30
Diggers, . . . . .	4	-	-	-	4
Dyers, . . . . .	2	-	-	-	2
Shoemakers, . . . . .	5	3	-	3	11
Tailors, . . . . .	1	1	-	-	2
Curriers, . . . . .	-	-	2	-	2
Harness and saddle makers, . . . . .	-	-	-	1	1
Cabinet makers, . . . . .	2	-	-	-	2
Carpenters and joiners, . . . . .	8	2	16	2	28
Makers of French flooring, . . . . .	3	-	-	-	3
Coppersmiths, . . . . .	4	3	-	-	7
Millwrights, . . . . .	4	21	25	4	54
Blacksmiths, . . . . .	1	11	-	-	12
Locksmiths, . . . . .	4	-	-	1	5
Turners and borers, . . . . .	1	5	2	-	8
Workers in copper, . . . . .	-	5	-	-	5

OCCUPATIONS.	From July 15, 1887, to Decem- ber 31, 1888	1889	1890	1891 (December not included)	Totals
<i>Males — Con.</i>					
Firemen (for stationary engines), . . .	-	-	1	-	1
Plumbers, . . . . .	5	-	-	-	5
Masons and helpers, . . . . .	4	-	-	-	4
House painters, . . . . .	3	-	-	5	8
Painters and decorators, . . . . .	1	-	-	-	1
Painters (miniature), . . . . .	2	-	-	-	2
Printers (typographical), . . . . .	-	-	3	2	5
Compositors (typographical), . . . . .	-	-	1	-	1
Pastry cooks' boys, . . . . .	-	-	-	1	1
Totals, . . . . .	542	195	247	180	1,164
Apprentices (paid or unpaid), . . . . .	83	23	28	37	171
GRAND TOTALS, . . . . .	625	218	275	217	1,335
<i>Females.</i>					
Cashiers, accountants, writers, . . . . .	5	1	2	-	8
Teachers :					
In city schools, . . . . .	1	-	-	-	1
In charge of infant classes, . . . . .	1	1	1	-	3
Shop girls and cashiers, . . . . .	19	4	6	6	35
Young persons employed in mercantile estab- lishments (16 to 20 years of age), . . . . .	18	5	21	-	44
Seamstresses, pattern makers, underclothing makers, . . . . .	154	27	14	29	224
Embroiderers, . . . . .	25	-	-	-	25
Feather workers, . . . . .	13	-	-	-	13
Enamellers, . . . . .	10	-	-	-	10
Bead and lace workers, . . . . .	15	-	-	-	15
Milliners, . . . . .	3	-	3	1	7
Edgers of mourning paper, . . . . .	3	-	-	-	3
Artificial flower makers, . . . . .	8	-	1	4	13
Workers on foot wear, . . . . .	4	-	-	-	4
Workers on furniture, . . . . .	1	-	-	-	1
Workers for tailors, . . . . .	3	-	-	-	3
Workers on neckwear, . . . . .	14	-	1	-	15
Vest makers, . . . . .	10	-	-	-	10
Paper box makers, . . . . .	-	-	1	-	1
Newspaper folders (printing offices), . . . . .	4	1	-	-	5
Machine operators :					
For tailors, . . . . .	2	3	-	2	7
On foot wear, . . . . .	5	2	-	-	7
On underwear, . . . . .	2	-	1	7	10
Corset makers, . . . . .	1	-	-	-	1
Washerwomen, . . . . .	3	-	-	-	3
Bread carriers (in baskets), . . . . .	1	-	-	1	2
Nurses, . . . . .	1	-	-	-	1
Governesses, . . . . .	3	1	1	-	5
Chambermaids, . . . . .	5	1	-	-	6
Cooks, . . . . .	40	30	35	38	143
Maids of all work, . . . . .	326	185	246	254	1,011
Saloon girls for wine merchants, . . . . .	-	10	10	2	22

OCCUPATIONS.	From July 15, 1887, to Decem- ber 31, 1888	1889	1890	1891 (December not included)	Totals
<i>Females — Con.</i>					
Charwomen, . . . . .	60	43	68	57	228
Door keepers, . . . . .	-	1	1	1	3
News dealers, . . . . .	-	-	-	1	1
Totals, . . . . .	760	312	416	404	1,891
Apprentices (paid or unpaid), . . . . .	88	4	4	6	102
GRAND TOTALS, . . . . .	848	316	419	410	1,993

The totals in the tables transcribed from the French are not always mathematically correct. It is, however, impossible to locate the error.

Notwithstanding the establishment of a limited number of free municipal registries and the provision for finding work through the trade syndicates connected with the labor exchanges in France, the licensed employment registries still remain the most extensive agencies for placing workpeople out of employment.

The licensed employment registries are conducted under a decree possessing the force of law promulgated on the 25th of March, 1852, under the sanction of Louis Napoleon. The text of the decree is as follows :

ART. 1. Henceforward no one will be allowed to carry on an employment registry, under any pretext, or for any professions, situations, or employments whatever, without a special permit issued by the municipal authority, only to be granted to persons of established repute. Present proprietors of registry offices are accorded a delay of three months in which to obtain the said permit.

ART. 2. The application for a license must state the conditions under which the applicant proposes to conduct his business.

He must conform to these conditions and to the regulations which shall be framed in virtue of Art. 3.

ART. 3. The municipal authority shall supervise the registry offices, so as to insure that order be maintained therein, and that they be conducted honestly. It shall draw up the rules necessary for this purpose and regulate the list of charges leviable by the owner.

ART. 4. Any contravention of Art. 1, of the second paragraph of Art. 2, or of the regulations made in virtue of Art. 3, shall be punishable by a fine from one to fifteen francs, and imprisonment not exceeding five days, or by either of these penalties. The maximum of the two penalties will always be applied to an offender, who within the previous twelve months has been convicted of an infringement of the present decree or of the police regulations aforesaid. These penalties are apart from any restitution or damages entailed by the acts



with which the proprietor is charged. Art. 463 of the Penal Code applies to the above-named contraventions.

ART. 5. The municipal authority may cancel the license of (1) persons who have incurred, or should hereafter incur, one of the penalties provided by Art. 15, paragraphs 1, 3, 4, 5, 6, 14, and 15, and by Art. 16 of the Decree of 2nd February, 1852; (2) of persons who have been, or may hereafter be convicted of conspiracy; (3) of persons who may hereafter be condemned to imprisonment for contravention of the present decree or of the regulations framed in virtue of Art. 3.

ART. 6. The powers above conferred on the municipal authority shall be exercised by the Prefect of Police for Paris and the jurisdiction of his prefecture, and by the Prefect of the Rhône for Lyons and the other communes in which he discharges the functions conferred on him by the law of 24th June 1851.

ART. 7. The withdrawals of licenses and the regulations issued by the municipal authority in virtue of the foregoing provisions shall not take effect until after the prefect has approved of them. (*Le Placement des Employés*, pp. 133-4.)

The following table exhibits the work of the licensed employment registries during the year 1891:

OCCUPATIONS.	Number of Offices	Replies Re- ceived	YEARLY NUMBER OF			
			Appli- cations	Offers	SITUATIONS	
					Per- manent	Tem- porary
Butchers and meat dealers, . . .	18	17	54,902	21,062	16,980	2,436
Bakers, . . . . .	91	81	121,118	47,882	25,971	40,114
Brewers, . . . . .	1	1	-	-	-	-
Hair dressers, . . . . .	30	29	84,887	22,929	15,006	42,047
Shoemakers, . . . . .	1	1	6,000	4,200	1,700	-
Domestic servants:						
In private houses, . . . . .	1,036	717	1,378,124	611,774	254,716	52,440
On farms, . . . . .	49	37	10,576	8,442	5,682	698
Employés:						
In mercantile offices, . . . . .	4	4	20,340	3,120	1,776	252
In provision stores, . . . . .	2	2	8,400	7,200	5,760	240
In grocery stores, . . . . .	3	2	20,080	28,320	26,400	-
In grist mills, . . . . .	8	8	1,534	1,284	1,052	228
Waiters (restaurants), . . . . .	74	61	712,848	149,984	88,952	193,380
Cow keepers, . . . . .	1	1	6,000	8,000	1,800	360
Teachers (both sexes), . . . . .	17	9	24,840	12,132	6,480	396
Gardeners, . . . . .	2	2	120	120	120	-
Horseshoers and wheelwrights, . . . . .	3	3	956	788	752	-
Sailors, . . . . .	22	9	6,468	1,668	1,200	-
Cooks, . . . . .	8	8	29,662	14,708	4,938	29,400
Tailors, . . . . .	1	1	24	24	24	-
Dyers, . . . . .	3	1	200	150	150	-
TOTALS, . . . . .	1,374	994	2,495,079	938,237	459,459	316,991

The following table exhibits, in form permitting comparisons to be easily made, the operations of all classes of employment agencies in France for the year 1891:

EMPLOYMENT AGENCIES.	Number in Operation in 1891	APPLICATIONS		PERSONS PLACED	
		For Work	For Work- people	Perma- nently	By the Day or Temporarily
Guilds, . . . . .	32	6,288	6,188	6,188	-
Free municipal registries, . . . .	24	24,805	13,292	10,856	-
Trade syndicates :					
Employers, . . . . .	54	22,594	2,851	18,396	430
Workers, . . . . .	322	122,666	71,639	86,124	8,538
Mixed, . . . . .	13	2,558	1,882	1,896	1,396
Licensed employment agencies, . .	1,374	2,495,079*	938,237*	459,459*	361,991*
Friendly societies, . . . . .	59	35,041	33,069	17,794	16,000
Convents and philanthropic agencies, .	76	132,036	25,911	26,227	107,431

\* These figures only relate to the 994 private registry offices which furnished information.

### OHIO.

Free public employment offices were created in the State of Ohio on the 28th of April, 1890. The statute governing such offices places them under the supervision and control of the Commissioner of Labor Statistics who was authorized and directed to organize and establish immediately after the passage of the Act "in all cities of the first class, and cities of the first and second grade of the second class in the State of Ohio, a free public employment office," and to appoint one superintendent for each of said offices to discharge the duties set forth in the statute. The superintendents are required to properly designate their offices by a sign and —

To receive all applications for labor of those desiring employment and those desiring to employ labor, and record their names in a book kept for that purpose, designating opposite the name of each applicant the character of employment, or labor desired, and the address of such applicant. Each of said superintendents shall be provided with such clerical assistance as in the judgment of the commissioner (of Labor Statistics) may appear necessary for properly conducting the duties of their several offices. No compensation or fee shall, directly or indirectly, be charged to or received from any person or persons seeking employment or any person or persons desiring to employ labor through any of said offices. Said superintendents

shall make a weekly report on Thursday of each week to said commissioner of all persons desiring to employ labor, and the class thereof, and all persons applying for employment through their respective offices, and the character of employment desired by each applicant; also, of all persons securing employment through their respective offices and the character thereof, and a semi-annual report of the expense of maintaining such offices.

Said commissioner shall cause to be printed weekly a list of all applicants and the character of employment desired by them, and of those desiring to employ labor, and the class thereof, received by him from the respective offices aforesaid, and cause a true copy of such list on Monday of each week to be mailed to the superintendent of each of said offices in the state, which said list by the superintendent shall be posted immediately on receipt thereof in a conspicuous place in his office, subject to the inspection of all persons desiring employment.

Said superintendents shall perform such other duties in the collection of labor statistics as said commissioner shall determine. Any superintendent or clerk as herein provided, who directly or indirectly charges or receives any compensation from any person whomsoever in securing employment, or labor for any other person or persons as provided in this act, shall be deemed guilty of a misdemeanor, and be fined in any sum not exceeding fifty dollars, and imprisoned in the county jail or workhouse not exceeding thirty days.

The superintendents receive a salary to be fixed by the City Council of the cities in which the offices are located and the clerks receive a salary limited to fifty dollars per month, all salaries being paid out of the city treasury. The tenure of office for superintendents and clerks is fixed at two years from the date of employment, but the Commissioner of Labor Statistics has the power to remove either superintendents or clerks for good and sufficient cause.

The only definite statements with regard to the work of these offices have been made in the reports of the Commissioner of Labor Statistics who is entrusted with their supervision. The Commissioner in 1891 stated: "The work done by the offices, during the year 1891 and from the time their doors were first thrown open to the public, has been of such a pronounced beneficial character to patrons of the offices that the result set forth in the summary of reports speaks in terms stronger than

I can command in favor of their being made a permanent part of the State government."

The summary of the reports referred to relates to the reports made by the superintendents of the different offices who were requested by the Commissioner to answer certain questions as to the general success of the offices under their charge. It is sufficient to say that each of the superintendents reported that their offices were working in a satisfactory manner and were filling a needed want.

In 1892 the present Commissioner, Hon. W. T. Lewis, remarks as follows :

Over two years of history have been made by the Free Public Employment Offices, and the time has arrived when judgment must be passed upon them. Are they really useful, needed institutions?

A statistical report of the work accomplished by each of the five offices under operation in the different cities is given elsewhere. Mere figures, however, cannot do justice to an institution which, besides involving so many benevolent features, has no precedent upon which to base comparisons. The daily incidents and experiences of the officers, the constant illustrations of their powers for good and the possibilities seen in the future, form a better basis of judgment.

While it is impossible to go into these things in detail, it should be known that the public employment office is democratic in its nature, being frequented by people of every condition of life. The contractor, in hurried search of mechanics or laborers ; the richly-dressed woman from the aristocratic precincts, who has suffered a vacancy in her extensive domestic establishment ; the railway chief engineer, with an order for a hundred or more men to be sent out on the line to some point of construction ; the business man, who sharply defines the standards by which must be measured a sought-for bookkeeper, clerk or office boy ; the boarding house mistress whom calamitous circumstance has bereft of a cook ; the hotel steward and the restauranter, with a list of wants to be filled within the hour ; manufacturers, light and heavy, with calls for girls, men and boys, or families in bulk — these and a hundred others bring their wants in person or shout them over the telephone. In the people who come to the public employment office for work is represented the whole range of trades and the various lines of clerical, mercantile, factory and domestic occupation. The brawny laborer is followed by the young miss just graduated from the high school, anxious to put her education to some financial account, and she in turn by the young emigrant

couple, fresh from Castle Garden, who come direct to the office from the railroad station, bringing their baggage with them. The cases cited are not suppositions, but are taken from the actual experiences of a single office. Men of education and former prosperity accept, under stress of circumstances, such character of employment as pride would forbid them to openly solicit. Boys accompanied by parents desirous of getting them started at trades, young men from neighboring towns seeking the enlarged opportunities of the city, girls eager to exchange the 'drudgery' of farm life for the duties of a domestic or a shop girl, men and women well advanced in years looking for positions suited to their failing strength, all visit the employment office and make known their desires and expectations.

Whether employers or employés, applicants make free to express opinion as to the office and its manner of working. This untrammelled sentiment, coming from such widely-varying sources forms an infallible guide by which to judge the merits of the free employment office system. The great preponderance of expression is of an approving and commendatory character. In most instances applicants recognize and appreciate the principle where they receive no immediate benefit.

To state that all wants are satisfied, and that each applicant is sent on his or her way rejoicing, would be to announce the advent of the millenium, a period which, the most optimistic must acknowledge lies yet some distance in the future. Necessarily there are many disappointments. These are due partly to impractical ideas entertained by both employer and employé, and again, it must be confessed, by the inability of the office to meet many wants that are not impractical. The truth of the matter is, the system is still in its infancy, it will require time and much intelligent effort to perfect it. The absence of precedent by which to be guided, the pre-existing prejudice in the public mind against employment and intelligence offices owing to the odium which has attached to the private concerns, the almost total lack of means of advertising, and the many annoyances incident to any new departure, have tended to retard its development. But in spite of all these hindrances substantial progress has been made. In the communities in which the offices are located many firms depend upon them almost exclusively in securing help, and thousands of employés could testify to their usefulness out of personal experience. The offices have benefited not only the large cities, but the adjacent farming communities have used them to quite a considerable extent, as have also business men in the smaller towns and cities throughout the state.

It should be said that the direct cause of the establishment of free public offices in Ohio was the complaint respecting the operations of the private intelligence offices, due to dishonest practices. As a result of the establishment of the public offices Commissioner Lewis states that "the private intelligence office evil has been completely eradicated in three of the cities (Columbus, Toledo, and Dayton) where the free system has been established, but a few of these concerns manage to still exist in Cleveland and Cincinnati. With the growth of the free offices they will eventually disappear."

### EMPLOYMENT BUREAUS IN MASSACHUSETTS.

Agencies for securing employment are, in Massachusetts, confined to the ordinary intelligence or professional employment office, conducted on a mercantile basis, that is, as a money making enterprise, and to employment bureaus conducted as philanthropic agencies, in which profit is not considered and the welfare of the person seeking employment is made the prime object. Such bureaus are frequently connected with some form of charitable work. They are most numerous and efficient in the city of Boston, and the following summary describes the operations of the principal bureaus of this class:

#### PHILANTHROPIC EMPLOYMENT BUREAUS IN BOSTON.

##### *The Industrial Aid Society.*

This institution has its headquarters in the Charity Building, Chardon street, Boston. It is supported by the income of invested funds and by annual contributions from subscribers. The name, age, place of birth, religion, residence, conjugal condition, number in family, trade or occupation, whether able to read and write, name and address of last employer, and length of time employed, are obtained with respect to each applicant and recorded upon an indexed file. The applicant is given a registered number, and this number is used in preference to the name in referring. Employers are also given a number, and when a place is found for an applicant, the numbers indicating the employé and employer are entered upon the files. All classes of labor are dealt with. No fee is charged applicants. Applicants are required to furnish a recommendation

from their last employer, and this is verified, and the character of every applicant investigated as far as possible. For instance, if application is made for a first-rate mechanic, who is to be sent out of town, his capacity is proven by inquiry. Employers are secured by advertisement in the daily papers and also by personal solicitation. No fee is charged employers. When it appears necessary, employers are investigated as to their character and financial responsibility. This is done by communication with clergymen, selectmen, or societies in the place where the employer lives. If a girl is to be sent to a place, the employer, unless known, is very carefully scrutinized before the applicant is sent. The number of applicants for employment during 1892 was 3,984 and in 1893, 3,402.

The following table indicates the number of persons furnished places in 1892 and 1893, and the character of the places furnished:

SEX AND KIND OF PLACES.	APPLICANTS	
	1892	1893
<b>MALES.</b>	1,543	1,716
<i>Adults.</i>	1,270	1,503
Contract labor, . . . . .	82	164
Farms, . . . . .	415	334
Gentlemen's places and indoor service, . . . . .	128	120
Short jobs, . . . . .	268	317
Mechanical work, . . . . .	80	74
Snow shovelling, . . . . .	178	267
Stables and teams, . . . . .	106	202
Stores and offices, . . . . .	13	25
<i>Minors.</i>	273	213
Farms, . . . . .	89	72
Gentlemen's places, . . . . .	7	13
Labor, . . . . .	2	-
Short jobs, . . . . .	30	9
Shops, . . . . .	93	68
Stores and offices, . . . . .	52	51
<b>FEMALES.</b>	799	737
Places in city, . . . . .	427	-
Places in country, . . . . .	274	-
Permanent places, . . . . .	-	297
Temporary places, . . . . .	-	306
Day work, . . . . .	52	99
Women with children found homes, . . . . .	46	35
<b>BOTH SEXES, . . . . .</b>	<b>2,342</b>	<b>2,453</b>

The nationality of applicants in each of the years named is shown in the following table :

COUNTRIES.	MALES		FEMALES	
	1892	1893	1892	1893
America, . . . . .	1,172	1,100	264	182
Armenia, . . . . .	17	7	-	-
Australia, . . . . .	1	-	-	-
Austria, . . . . .	9	7	-	-
Azores, . . . . .	4	-	-	-
Belgium, . . . . .	5	1	-	-
British Provinces, . . . . .	318	300	75	59
Denmark, . . . . .	26	27	1	1
England, . . . . .	202	203	47	33
Finland, . . . . .	7	5	-	-
France, . . . . .	9	8	-	-
Germany, . . . . .	144	101	8	5
Greece, . . . . .	6	5	-	-
Holland, . . . . .	2	3	-	-
India, . . . . .	1	-	-	-
Ireland, . . . . .	500	437	324	243
Italy, . . . . .	72	51	-	-
Japan, . . . . .	1	1	-	-
Norway, . . . . .	24	19	1	-
Poland, . . . . .	82	45	-	-
Portugal, . . . . .	6	8	-	-
Russia, . . . . .	70	29	-	-
Scotland, . . . . .	70	71	20	16
South Africa, . . . . .	1	-	-	-
South America, . . . . .	3	5	-	-
Spain, . . . . .	1	1	-	-
Sweden, . . . . .	166	130	7	1
Switzerland, . . . . .	7	8	-	-
Wales, . . . . .	5	8	-	-
West Indies, . . . . .	22	19	5	-
Unknown, . . . . .	-	-	279	268
TOTALS, . . . . .	2,953	2,599	1,031	803

Of the applicants in 1893, 2,026 were adult males, 573 male minors, 758 females 18 years of age and over, and 45 females under 18 years of age. As a rule, applicants are untrained for the particular service for which they wish employment, although those applying for agricultural labor are skilled. Communication is entered into with other employment agencies in the city of a similar character, but not with professional employment offices. The dearth of labor in various localities is determined by visiting agents of the society and by correspondence received from all parts of New England. From October 1, 1892



to March 1, 1893, 1,436 male applicants were received; from October 1, 1893 to March 1, 1894, there were 2,307 male applicants; from October 1, 1892 to March 1, 1893, applications were received from 240 females; and from October 1, 1893 to March 1, 1894, from 1,159 females.

The number of males furnished work month by month, beginning with October, 1892 and ending with February, 1893, and during the corresponding months beginning with October, 1893 and ending with February, 1894 is shown in the following table:

MONTHS AND YEARS.		Number of Males furnished Work	MONTHS AND YEARS.		Number of Males furnished Work
October, . . . . .		234	January, . . . . .		335
1892, . . . . .		151	1893, . . . . .		121
1893, . . . . .		83	1894, . . . . .		214
November, . . . . .		284	February, . . . . .		438
1892, . . . . .		205	1893, . . . . .		208
1893, . . . . .		79	1894, . . . . .		170
December, . . . . .		247	TOTALS, . . . . .		1,538
1892, . . . . .		123	1892-93, . . . . .		868
1893, . . . . .		124	1893-94, . . . . .		670

From October 1, 1892 to March 1, 1893, 278 females were furnished work, and from October 1, 1893 to March 1, 1894, 554 females were supplied with places.

This society was established in 1835 and incorporated in 1847. It is one of the most important agencies of its class in the city. Its object, as expressed in its report, is

1. To help worthy applicants find the work for which they are fitted.
2. To give employers the sort of help they want.
3. To provide homes for the young, where they will be under wholesome influence, and learn to support themselves.
4. To improve the quality of work, increase the value of service, and elevate the laborer.
5. To adapt, in every proper way, its action to the assistance of working people, to advance their interests, and promote the public good.

*Boston Young Men's Christian Association.*

This association conducts an employment registry which is supported from the funds of the association. Fully 66 per cent

of the places filled, however, are from applications received from persons not members of the association, the registry being open to all males.

Applicants are required to fill a registry form, with full particulars as to residence, age, place of birth, length of residence in Boston, conjugal condition, former employer, length of service under previous employer, reason for leaving employment, with references and statements as to the kind of employment desired, the amount of salary requested, and whether or not the applicant is a member of the association, or a member of the church, and if so, of what church.

The association, through its employment agency, seeks to assist young men to suitable employment, and to provide employers with reliable help. No fee is charged either employer or applicant. References are invariably required and carefully investigated. The labor dealt with includes bookkeepers, clerks, and other mercantile employments, factory hands, errand boys, laborers, etc. In investigating references, the persons named as referees are expected to fill a blank which is recorded as confidential, giving full particulars as to the character and qualifications of the applicant. Places are secured by personal application at the office, no advertising being done, except through the organs of the association. Great care is taken that applicants are sent to proper places, and not to situations where there would be any danger of moral deterioration.

The following table shows the approximate number of applications in 1892 and 1893 :

MONTHS.	APPLICATIONS	
	1892	1893
January, . . . . .	300	400
February, . . . . .	300	400
March, . . . . .	150	175
April, . . . . .	100	125
May, . . . . .	100	125
June, . . . . .	100	125
July, . . . . .	100	125
August, . . . . .	100	125
September, . . . . .	100	125
October, . . . . .	150	175
November, . . . . .	300	400
December, . . . . .	300	400
TOTALS, . . . . .	2,100	2,700

Applications are usually most numerous in the months of October, November, December, January, February, and March. About 33 per cent of the persons applying are furnished with places. Fifty per cent of the applicants are of American birth, 16 per cent of Irish birth, and the others are French, German, and other nationalities. About 33 per cent are married; 50 per cent are under 21 years of age, 40 per cent 21 to 45 years, and 10 per cent over 45 years.

Nearly all the applicants are willing to take any kind of work, and about 50 per cent are unskilled. The employment agency is not in communication with other similar agencies, although applicants are sometimes sent to the Industrial Aid Society or to bureaus where employment may possibly be furnished to them.

No method of investigation as to the dearth of labor is used, and no knowledge of the labor market is obtained except through applications made at the office.

The following table shows the approximate number of applications in the months of December, 1892, and January, February, and March, 1893, together with the number in the corresponding months of 1893 and 1894:

MONTHS.	APPLICATIONS	
	1892-93	1893-94
December, . . . . .	300	400
January, . . . . .	400	450
February, . . . . .	400	450
March, . . . . .	175	250
TOTALS, . . . . .	1,275	1,550

As stated previously, not more than 33 per cent of the applicants are placed, as a rule.

### *Young Men's Christian Union.*

This well-known institution conducts, as part of its work, an employment bureau which is supported from the regular funds of the Union, derived in part from subscriptions received from friends of the Union, and in part from annual fees from those who are enrolled as members.

Applicants for places are required to fill a blank stating their name and residence (not restricted to the city of Boston), the kind of occupation wanted, age, place of birth, whether married or single, with whom formerly employed, the occupation, reason for being out of employment, and names of references.

No fees are required from applicants for positions, nor are applicants for help charged a fee, the services of the bureau being entirely gratuitous in every way. The especial influence of the bureau is exerted in favor of young men, not, however, restricted to members of the Union.

The class of labor dealt with is largely mercantile or industrial, very few persons applying for domestic service. Letters of recommendation are required from past employers, if the applicant has been employed, otherwise from persons who are acquainted with the applicant and able to furnish the required information respecting him. The persons named as references are requested to fill a confidential blank, stating the length of time concerning which they have had knowledge of the applicant, whether or not they have employed him, and statements as to his character and qualifications. The applications are received very largely from well-known business concerns or from well-known persons in the city of Boston, and therefore it is not necessary, as a rule, to investigate the standing of employers. Places are secured by notices issued in the Union bulletins, posted in the rooms, by the general advertisement of the employment bureau, and by cards, which are freely circulated, describing the facilities and purposes of the bureau.

From April 1, 1892 to April 1, 1893, 817 applications were received for places; while from April 1, 1893 to April 1, 1894, the number of applications was 797. The number of persons for whom employment was found from April 1, 1892 to April 1, 1893 was 205, and from April 1, 1893 to April 1, 1894, 223.

No record is kept of the nationalities of applicants for employment, who are, with few exceptions, males, nor is any record kept of the conjugal condition of applicants. Persons applying are mostly from 16 to 30 years of age, though many who are older apply. Many applicants have just finished their education and are about entering upon active life.

No method of communication with other employment agencies is pursued, nor is any method used to determine the dearth of

labor in Boston or in other localities. Contrary to the experience of nearly every other bureau, the number of applicants was less during the season ending with April 1, 1894 than during the corresponding season in the previous year, and the number of places filled, month by month, was in excess of the previous year.

The experience of this bureau for the past 26 years has shown that the demand for intelligent, reliable, and active boys and young men has generally been in excess of the supply, and much of the time considerably in excess.

The bureau has been long established, and has received for many years the hearty co-operation of business men and others interested in this work.

*Boston Young Women's Christian Association.*

The employment bureau connected with this institution is supported by the fees received from applicants and from employers. Applicants register personally, or make application by letter. Women only are dealt with. Every kind of work that is open to women is within the province of the bureau. The registry includes a business agency and a bureau of domestic service, and the places filled include industrial, mercantile, domestic, and professional employments, the latter, however, to a limited extent. In the business agency, the registry fee is 25 cents, and if a permanent position is found, a fee of one dollar is charged. If a temporary position is secured, the fee is 50 cents. The registry fee covers a period of one year. In the department for nurses, the registry fee is two dollars, and no extra fee is contingent upon employment. No applicants are debarred, however, on account of financial condition. The fee system is maintained to preserve the self-respect of the applicants, who are expected to liquidate obligations as soon as able, after obtaining work. Applicants for domestic service are required to give two references, which are investigated by an agent of the bureau; and the persons named as references are expected to fill a blank which is kept on file. This blank, when filled, is sometimes shown to intending employers. Girls are sent to places with what is called "The Introductory Slip." This states that references have been investigated, and that the character, capacity, etc., of

the applicant has been found to be satisfactory. If this does not satisfy the intending employer, the referee's written statement may be seen in the office. In the business agency, applicants are always required to furnish references, which are investigated. The applicants for positions as trained nurses have a hospital certificate which is all that is required. The experienced nurses, without such a certificate, must have references from three physicians satisfactory to the Board of Examiners if they wish to secure employment. In urgent cases, advertising is resorted to, but this is not the usual practice, reliance being placed upon personal applications from intending employers, who are charged a fee of 75 cents in the domestic department. In the business agency employers are charged no fees. Persons wishing help frequently apply here, because the character of the employés furnished is considered to be of a high standard. The demand for domestic service is very much greater than the supply, but in the business agency the reverse is the fact, applicants being twice as numerous as the positions. There is no system of investigation of employers in the business agency, but great care is taken to place applicants in positions where there can be no question as to the character of employers. In the domestic bureau, also, it is the aim to supply private houses, hotels, restaurants, and places of a character to which no exception can be taken.

The following table shows the number of applicants during the years 1892 and 1893, with the number of places filled :

MONTHS.	APPLICANTS				PLACES FILLED			
	DOMESTIC BUREAU		BUSINESS AGENCY		DOMESTIC BUREAU		BUSINESS AGENCY	
	1892	1893	1892	1893	1892	1893	1892	1893
January, . . .	161	283	154	204	136	205	144	140
February, . . .	179	197	166	179	173	127	115	133
March, . . .	202	242	165	200	175	212	123	195
April, . . .	300	283	153	215	200	209	120	245
May, . . .	341	393	200	219	239	287	160	249
June, . . .	287	312	165	196	207	251	145	176
July, . . .	223	265	140	211	166	181	100	150
August, . . .	192	271	143	276	140	197	90	136
September, . .	475	635	420	426	333	369	172	182
October, . . .	558	790	385	473	390	385	200	158
November, . .	343	541	242	252	246	284	180	132
December, . .	237	317	187	205	189	229	135	211
TOTALS, . . .	3,558	4,529	2,519	3,058	2,504	2,936	1,684	2,107

From March, 1892 to March, 1893, 2,154 applicants were registered in the domestic service bureau, and 1,958 placed. During the same period, 2,583 applicants were registered in the business agency, and 1,708 places filled. From March, 1893 to March, 1894, 4,659 persons were registered in the domestic service bureau, and only 2,987 placed; while, during the same period, 3,097 persons were registered in the business agency, and 2,101 placed. The number of persons placed in the business bureau was divided into the following classes of employment: Nurses, 233; attendants, 406; governesses, nursery girls, etc., 304; housekeepers and matrons, 232; dressmakers and seamstresses, 529; mercantile orders, 267; miscellaneous, 130. From this classification it will be seen that the word "business" is used in a broad sense, and is not restricted to merely commercial employment.

The nationalities of applicants during the single month, October, 1893, in the domestic bureau, covering 790 persons, were as follows: Native born, 117; born in Ireland, 271; British Provinces, 252; England, 29; Sweden, 62; Scotland, 23; Germany, 15; Switzerland, three, and Africa, 18. This is a fairly typical month. During the same month, 473 applicants were registered in the business agency, of the following nationalities: Native born, 232; born in the British Provinces, 128; Ireland, 34; England, 22; Germany, 14; Scotland, 11; Sweden, 11; France, six; Africa, five; Switzerland, four; Norway, four; Austria and Italy, one each.

It is estimated that 33.33 per cent of the applicants are married, and it is also estimated that 50 per cent are under 30 years of age; 40 per cent 30 to 45 years; and 10 per cent over 45 years. The larger part of the applicants are between 21 and 30 years of age.

About 50 per cent of the applicants in the domestic service bureau have had little or no experience, but about 66 per cent of those applying in the business agency are said to have had experience for the work for which they apply.

No systematic method of communication with other employment agencies is used, but the institution is in constant correspondence with other institutions with respect to the dearth of labor in other localities, and many requests are received for help from persons outside of Boston.



The following table shows the number of applicants in December, 1892, and January and February, 1893, in comparison with the number in the corresponding months of 1893 and 1894, with the number of places found for such applicants :

Months.	APPLICANTS				PLACES FILLED			
	DOMESTIC BUREAU		BUSINESS AGENCY		DOMESTIC BUREAU		BUSINESS AGENCY	
	1892-93	1893-94	1892-93	1893-94	1892-93	1893-94	1892-93	1893-94
December, . .	237	317	187	205	180	229	135	211
January, . . .	283	340	204	257	205	213	140	153
February, . . .	197	261	179	166	127	170	133	115
TOTALS, . . .	717	927	570	627	521	612	408	478

### *Women's Educational and Industrial Union.*

This is an incorporated society having its headquarters at 264 Boylston street, Boston. Its articles of incorporation specify that it is for the purpose "of increasing fellowship among women, in order to promote the best practical methods for securing their educational, industrial, and social advancement." As part of its work, it conducts an employment bureau, which, while mainly philanthropic, and therefore entitled to be classed under that head, is also mercantile. The philanthropic branches are supported by money received from entertainments given by members and friends of the Union and by receipts from subscriptions. A personal description of persons wishing employment is kept upon file, with the names of previous employers who have been given as references. To these previous employers a blank is sent with the request that it be filled and returned to the Union. This blank covers information as to length of employment of the applicant, and includes such facts as indicate character and industrial capacity. The classes of labor dealt with include nurses, attendants, companions, matrons, general domestic service, dressmakers and seamstresses, errand girls, bookkeepers, cashiers, clerks, etc. Experienced nurses are furnished, and the largest class dealt with includes domestic help, dressmakers, and nursery women. A fee is charged the applicant, payable when the place is filled. This fee varies from 50 cents to one dollar, according to the kind of work. The fee charged applicants for domestic service is always 50 cents; for teachers, it is one dollar; and for nurses it varies according to



the wage paid the applicant, the maximum limit being one dollar. No special effort is made to secure employers, as there is always a sufficient number of applications. A fee is charged the employer according to a plan similar to that regulating the fees for applicants. No method of investigation of employers is

	MONTHS.	1892-93			
		DOMESTIC DEPARTMENT		GENERAL DEPARTMENT	
		Applicants Registered	Employers Registered	Applicants Registered	Employers Registered
1	May, . . . . .	274	170	-	-
2	June, . . . . .	230	110	-	-
3	July, . . . . .	183	183	-	-
4	August, . . . . .	162	291	-	-
5	September, . . . . .	230	330	229	140
6	October, . . . . .	377	277	450	171
7	November, . . . . .	306	226	401	157
8	December, . . . . .	249	288	162	92
9	January, . . . . .	207	302	211	124
10	February, . . . . .	201	360	105	117
11	March, . . . . .	267	175	198	248
12	April, . . . . .	138	277	235	210
13	TOTALS, . . . . .	2,864	2,989	1,991	1,250

The number of applicants registered, with the number supplied with situations is shown in the following table, by months, from May, 1893, to February, 1894, inclusive :

MONTHS.	1893-94	
	Number of Applicants Registered	Number Supplied with Places
May, . . . . .	491	385
June, . . . . .	496	449
July, . . . . .	433	389
August, . . . . .	369	342
September, . . . . .	884	452
October, . . . . .	1,228	482
November, . . . . .	570	272
December, . . . . .	484	306
January, . . . . .	618	423
February, . . . . .	414	272
TOTALS, . . . . .	5,987	3,772

The applications are usually most numerous in the months of April, May, June, September, October, and November.

used, it being considered unnecessary within the field of operation of the society.

The number of applications for places and for employés in the year ending May, 1892 was 3,499. From May, 1892 to May, 1894 the number, by months, is shown in the following table:

1892-93		1893-94						
TOTALS		DOMESTIC DEPARTMENT		GENERAL DEPARTMENT		TOTALS		
Applicants Registered	Employers Registered	Applicants Registered	Employers Registered	Applicants Registered	Employers Registered	Applicants Registered	Employers Registered	
274	170	289	303	202	224	491	527	1
230	110	325	345	171	136	496	481	2
133	183	337	433	96	67	433	500	3
162	291	223	193	146	91	369	284	4
459	470	474	331	410	145	884	476	5
327	448	660	322	578	172	1,228	494	6
797	333	329	401	241	97	570	498	7
411	380	242	255	242	85	484	340	8
418	426	314	340	304	138	618	478	9
306	477	211	220	203	93	414	313	10
465	423	-	-	-	-	-	-	11
373	487	-	-	-	-	-	-	12
4,856	4,248	3,394	3,143	2,593	1,248	5,987	4,391	13

The number of employés supplied with work for the year ending May, 1892 was 1,360. No males are dealt with. The greater number of the applicants are middle aged, although quite a number of girls between the ages of 12 and 16 apply. Many of the applicants are untrained but the exact proportion can not be stated. No method of communication with other employment agencies is used. During December, 1893 and January, 1894 there were more applications than during the corresponding months in the previous year, but during February the number of applications and the number of situations secured were about the same as usual, except that seamstresses, dressmakers, and trained nurses suffered more from lack of work than under ordinary circumstances.

### *The Temporary Home for Working Women.*

This institution is located at No. 453 Shawmut avenue. It is supported by charity contributions and by the proceeds of work done in the Home, such as sewing and laundry work. Persons desiring employment are registered as to age, nation-

ality, religion, and conjugal condition. They are required to comply with the rules and regulations of the institution, which relate to character, and they must be persons who are in need. The class of labor dealt with includes domestics, cooks, persons desiring employment in general housework, seamstresses, bookkeepers, teachers, or any other employment in which women may engage. No fees are charged applicants. No method of investigation is pursued with respect to them; they are, however, required, as previously stated, to be temperate, and must be persons in need. Employers are secured by advertising, and personal applications for help are received at the Home. No fees are charged employers, but any one desiring to do so, may contribute to the funds of the institution and thus help its work. No formal system of investigation of employers is pursued, but the character of the places to which women are sent for employment is known to the institution. In 1890, 421 applications for employment were received; in 1891, 289; in 1892, 281; and in 1893, 311.

The following table shows the number of applicants, together with the number of places filled, during 1892 and 1893 by months:

MONTHS.	APPLICANTS		PLACES FILLED	
	1892	1893	1892	1893
January, . . . . .	20	25	8	10
February, . . . . .	27	16	9	14
March, . . . . .	16	23	17	18
April, . . . . .	19	23	13	28
May, . . . . .	14	27	12	20
June, . . . . .	18	28	17	17
July, . . . . .	32	26	20	18
August, . . . . .	24	*-	19	8
September, . . . . .	27	47	16	23
October, . . . . .	36	41	26	33
November, . . . . .	29	23	19	14
December, . . . . .	19	32	12	24
TOTALS, . . . . .	281	311	188	222

\* House closed in August.

The situations filled, as shown by the preceding table, were permanent. Besides these, temporary places were found in 1893 for 234 persons. Of the applicants for work, 50 per cent

are estimated to be of Irish birth, 12.50 per cent of native birth, and the balance, 37.50 per cent, of various nationalities, including Polish, Russian, persons born in the British Provinces, or in England, and a few Germans and Swedes. The institution deals with women only, except in very few instances where positions have been found for men. About 12.50 per cent of the entire number placed through this institution are married. Of the applicants during the year 1893, 73 were 20 years of age and under, 104 between 21 and 35 years, and the remainder, 35 years of age or over. About 33.33 per cent of the total number of applicants are untrained for the particular service desired. No particular method of communication with other employment agencies is followed, except that if improper persons are found to be soliciting work, others are warned against them. No method is used to determine the dearth of labor in other localities.

The following table shows, in comparative form, the number of applicants and number of places furnished them month by month during the years 1892 and 1893, and 1893 and 1894, the record closing with the month of February in the last named year :

MONTHS.	APPLICANTS		PLACES FILLED	
	1892-93	1893-94	1892-93	1893-94
November, . . . . .	20	23	19	14
December, . . . . .	19	32	12	24
January, . . . . .	25	36	10	18
February, . . . . .	16	20	14	25
TOTALS, . . . . .	80	111	55	81

### *Boston Industrial Home.*

This Home is located on Davis street, near Harrison avenue, and was established in 1877. Its work covers a broader field than that of a mere employment agency, and the institution provides a home and means of support for poor unemployed persons, until they can find work or care for themselves. It is supported by the income from work done within its walls, and from donations, including profits on wood and coal supplied from the yard in connection with the institution.

A record is kept of the age, nativity, religion, conjugal condition, and occupation of applicants, and also as to whether their application is the first which they have made for work or aid through an institution. The Home endeavors to find work for all who apply, and to that end, conducts in its own building a laundry, carpenter shop, printing establishment, administers a teaming business, and also conducts a wood and coal yard. Men and women who apply are set to work in the building, thus enabling them to earn their meals and lodging, while the institution is seeking work for them outside.

No fees are charged, but applicants must comply with all the rules of the Home while under its care, as to cleanliness, deportment, etc. No definite method of investigation of applicants is pursued, but the institution endeavors to find out which are the more worthy, and to act accordingly.

Employers are secured through advertisements and notices in the daily papers, and a list is kept of those who advertise for help. The work of the Home is also freely advertised by printed matter put in circulation by friends and members, the printing being done in the shop connected with the institution. No fees are asked employers, but care is taken to place applicants where they will be given employment under good, moral influences, and persons are never sent to places where the character of the work or of the employer is open to question.

Upon the average, there are 110 applications per day for aid at the Home. About 25 per cent of the applicants are females. Most of the applicants are given food and lodgings in the Home until they can be set at work outside. The applications are most numerous in the winter months. The institution is generally able to find something for all applicants to do. If permanent positions outside cannot be found immediately, they are continued in temporary work in the Home.

Nearly every nationality is represented among the applicants. The proportions, as shown by the number applying in a single day, are as follows: Males; native born, 26; born in Scotland, three; in England, four; in Canada, six; in Ireland, 11; and in Germany, one. Females; native born, five; born in Canada, two; and in Ireland, nine. Judging from the record of single day applicants, about 22 per cent are married among the men; no record is kept respecting the women. The

average age of men is estimated at 37 years and of women about 42 years.

About one-half of the applicants of each sex are untrained, but those who apply are generally willing to accept any sort of employment that is available. Among the skilled applicants, some first-class workmen have been found.

The Home is in harmonious relations with the Associated Charities. Religious culture is made a prominent factor in its work. Many of the applicants come from penal or other institutions.

Every endeavor is made to obtain knowledge of the dearth of labor in various parts of the country, and the Home is constantly sending applicants to different localities to fill places. Friends and others acquainted with the work of the institution send to it all the information they can obtain in regard to the opportunities for employment in particular localities where they happen to reside.

The number of applicants during December, 1893 and the first three months of 1894 would average about 175 per day. This is a considerable increase over the previous season. The proportion of males and females, however, remained about as usual. Under the plan of the institution, as previously stated, all who apply are given something to do, and it is the policy of the institution to make employment the basis of relief.

### *The German Aid Society.*

This society, which has its headquarters in the Charity Building, Chardon street, Boston, maintains an employment agency. It is supported by the income received from a special fund. When a person applies for work, his name, address, age, occupation, wife's name, if any, name and age of children, if any, residence, length of time in America or in Boston, and whether naturalized or not, are asked, and the answers entered on file. All classes of labor are dealt with. Of the persons for whom places are found, about 50 per cent are laborers and farmers, 30 per cent mechanics, and 20 per cent clerks and those engaged in higher classes of occupation. No fee is charged applicants, and they are not investigated. Employers are obtained by letter and by personal solicitation, and they are charged no fees. If employers are living in Boston, or

near at hand, they are investigated, if possible, by a personal visit from an agent of the society. No other investigation is made.

In 1892, 618 applications for employment were received, and in 1893, 876 applications. During the months of October, November, December, January, February, and March in each year, applications are more numerous than at other times. In 1892, 402 applicants were furnished with work, and in 1893 places were found for 341 applicants. As a rule, German applicants receive the most work and attention. Of those who applied for aid in 1893, 50 were females and 826 males. Nearly all the applicants are trained for the special lines of work requested. The greatest difficulty found is in placing clerks and teachers who apply, as they are mainly unable to speak the English language, and this interferes with their obtaining situations. This society is in communication with the Industrial Aid Society of Boston, and with German societies all over the United States, and also with private employment offices, especially in regard to character and recommendations of applicants sent to the society from other cities or towns. No method is used by the society to determine the dearth of labor in other localities. The number of applicants was much larger in 1893 than in 1892, as will be noted from the statement previously made. On the other hand, it was very much more difficult to find work for applicants during the closing months of 1893 and the first months of 1894 than during the previous season. This society also supplies considerable aid to poor and needy persons of German birth in Boston, but that particular phase of its work does not enter into the present inquiry.

*Free Employment Bureau of the American Committee for  
Ameliorating the Condition of Russian Refugees.*

This society is supported by private subscriptions. Its field of operation is limited, as indicated by its title.

Applicants are required to fill out a blank giving the following facts: Name, age, occupation in Europe, and the particular town in which employed, occupation in this country with the name of the town and state, port of landing, date of landing, length of residence in Boston, present place of residence, number of members of family who are able to work, their pre-

vious occupation, number in family not able to work, number in family in Europe, objection to working on Saturday, if it exists. The blank is kept on file. All classes of labor are dealt with. No fee is charged those who apply. The last employer is visited, if near at hand, to investigate the character and industrial capacity of the applicant. Employers are secured by personal solicitation. No fee is charged employers, nor is any method of investigation of the employer used. From April 15, 1892 to January 1, 1893, 947 applicants were registered. During the year 1893, 1,334 applications were received, but during the winter months the number of applications are very much larger than at other seasons. About 75 per cent of those who apply obtain work. While the especial object of the Bureau is to aid Russian refugees, the nationality of applicants is not asked, nor is any discrimination made, if good references are offered. About 70 per cent of the applicants are males, and 30 per cent females, and like proportions indicate the married and single, respectively. Nearly all the applicants are of middle age, and, as a rule, they are trained for the positions they request. If a man is offered a position, who does not understand the trade, but is willing to learn it and work for small pay while learning, he is taught; and in cases where he has no tools, and cannot buy them, they are furnished by the Bureau. No method of communication with other employment agencies is used. Correspondence is carried on throughout the New England States with mills and factories for the purpose of aiding in the work of the Bureau. The number of applicants was very much larger during December 1893 and the first three months of 1894 than previously, and the number of places found for them very much less.

#### *St. John's Church.*

The employment agency maintained here is supported by the church, and from fees charged employers who are furnished with help. When a person applies for work, the name, address, nationality, age, religion, and previous experience are entered upon the files, and also the rate of wages desired, conjugal condition, the size of the family, if applicant is married, and the usual references are required. The class of labor principally dealt with includes domestic help, nurses, dressmakers,



and seamstresses, but no discrimination is made, and all applicants are received. No fee is charged applicants. A blank is sent to persons named as references by the applicant, which is expected to be filled and returned to the society, and in cases near at hand the agent calls personally to verify references. The particular points, respecting which reference is desired, relate to the character, ability, and absolute need of the applicants. Employers are secured by advertisement, usually in the daily papers, and also by personal solicitation by members of the church which supports the bureau. Employers are charged a fee of 50 cents, payable when the applicant is supplied with a situation. Usually, no method of investigating employers is followed. In cases where it seems needful, however, a personal investigation is conducted. The bureau is of comparatively recent establishment, having been organized in November, 1893. From that date up to the time of obtaining this report, 1300 applications had been received. At first, an attempt was made to supply men as well as women with places, but this was found impracticable within the resources of the bureau, and female help only is dealt with at present. No person is given work unless she has good references, and this limits the number for whom places are found. About 75 per cent of the women are single, about 50 per cent between 20 and 35 years of age, and about 50 per cent are untrained. The bureau comes into communication with other employment bureaus by letter. If an applicant gives answers which provoke inquiry, or mentions any other employment bureau, her antecedents are looked up, and the bureau named is visited or communicated with through the mails. No method is used to determine the dearth of labor.

*Directory for Nurses of the Boston Medical Library Association.*

This institution is located at No. 19 Boylston place, Boston. It supplies employment for a particular class of trained labor, namely, nurses. Applicants can register as trained nurses on diploma, showing extent of training. Experienced nurses are required to furnish references from physicians and families where service has been given. The original fee for registry is

five dollars for nurses, and two dollars for attendants upon the sick.

References are investigated, and the information is held as confidential by the Directory. The institution never advertises, but relies solely on applications from those who desire such persons as they furnish. Employers are not investigated and they are charged a fee of two dollars if a nurse or attendant is supplied. In 1893, 189 persons registered, about 20 of whom were men. This is about the usual number annually. Applications are most numerous from October 1 to May 30. All applicants finally secure employment, though the terms of employment vary in length.

It is estimated that 50 per cent of the applicants are of native birth, while 36 per cent are from the British Provinces, the remainder being English or of other nationality.

Of the total number registered in 1893, 169 were females and 20 males. Applicants are very seldom under 25 or over 50 years of age, the average age being about 32 years.

As will be understood, from the nature of the field of operation, all the applicants have either training for the positions or experience in the work they seek. Out of 1,115 applicants, the total number, 574 were trained nurses, 500 experienced nurses, 27 registered as attendants, and 14 as persons skilled in massage. Of this total number, 133 were males and 982 females.

No method of communication is used with other employment agencies, nor is any method followed to obtain information as to the dearth of labor, that not being considered necessary in the work of the agency.

The business depression made no material difference in the number of applicants, the number being about the same annually during the last few years. The Directory does not undertake to make any terms of employment between applicants and employers; its only province is to send nurses and others as applicants, leaving them to make their own terms and arrangements with their employers.

#### *Massachusetts Home for Intemperate Women.*

This is a philanthropic institution intended to aid a special class. It conducts a large laundry business, employing about

50 per cent of the women who are at the Home, and does various kinds of service for the public. The institution takes in persons of the class whom it seeks to aid, as long as it has room. There are some paying patients, and the income from this source, as well as the income from the laundry and sewing room which it also conducts, is used in the maintenance of the Home. It is not, however, self-supporting, but relies on contributions from those interested in its work. Among its inmates are women from every trade, the year ending April 1, 1893 showing 318 inmates, including housekeepers, seamstresses, cooks, factory employés, dressmakers, saleswomen, cigar makers, etc. No fees are charged applicants, with the exception that, as stated, some of the patients pay for accommodations received.

From the nature of this institution, its inmates being received from widely different sources, no accurate system of investigation of previous condition of applicants is followed, while endeavor is made to learn all that it is possible to discover under the circumstances. The inmates work in the laundry and sewing room during their stay. They are then placed outside, as opportunity offers. The institution never advertises for places, but receives personal applications for help, and an agent is constantly seeking opportunities to place inmates. Employers are charged no fees, but their character and standing are very closely investigated. Only a portion of the inmates desire work, while some go home to their families, and some of the paying patients do not need work.

The married women are largely in preponderance. The house is always filled, although in the winter months there are more applications than at other seasons of the year. A place is finally found outside for everybody who desires work.

For the year ending April 1, 1894, the estimated percentages indicating the nationalities of inmates are as follows: Native born, 50 per cent; foreign born, 25 per cent; born in the British Provinces, 10 per cent; other nationalities, 15 per cent.

About 50 per cent of the inmates are untrained, industrially. They are, however, taught various kinds of work in the institution, and the institution holds several diplomas from industrial exhibitions for specimens of work done by inmates.

No method is used to determine the dearth of labor in any particular locality. From what has been said, it will be seen that as the institution is always fully utilized to the extent of its capacity, and as its inmates are a special class, not exactly efficient industrially, the number of inmates was no greater during the period of the industrial depression than at other times.

*Trinity House.*

This institution is supported by Trinity Church in Boston, and is maintained as part of the regular parish work. Temperate, honest, and needy persons only are aided. The work is varied, as it deals largely with the parish poor of the church and of St. Andrews, which includes about 100 families, each of which receives aid in various ways according to its individual need. No fees of any kind are charged to the applicants for assistance, but the applicants for work are investigated as to capacity and character, and required to furnish references. Places are found through personal applications from those requiring help. No fees are charged employers, who are always investigated, and especial care is exercised to place persons in positions under good influences.

During 1892 the applicants reached about 15 persons a day from April 1 to November 1, and about 20 a day from November 1 to April 1, not including Sundays. In 1893 the average number of applications was about 20 per day from April 1 to November 1, and about 30 per day from November 1 to April 1. These figures are approximate. The work found for applicants is largely sewing, and every endeavor is made to keep applicants busy until some permanent work can be found for them, the most needy having preference.

The institution maintains a laundry which employs upwards of 18 women. A large number of persons who apply for employment have children; and, to provide for this class, a day nursery is supported for women who work in the institution or outside, for the care of children, the fee for such care being five cents per day. Women who work in the laundry in the institution receive one dollar a day if unskilled, and a somewhat larger wage is paid to those having experience. During 1893 about 33 per cent of all applicants were found places, while in 1892 about 50 per cent were placed. About 50 per cent of

the applicants are of native birth, the others being Irish, German, English, or natives of the British Provinces. Many of the applicants are well educated persons who, owing to the condition of business, are out of work, and many are of the trained class who apply to this institution in preference to going to other places, knowing that their condition will never be disclosed. In 1892, 150 temporary places were found for men and 200 in 1893. About 50 per cent of the applicants are married, including, however, widows and women with intemperate husbands, or husbands who are physically incapable of labor. The men who apply are of all ages; no particular record is kept of the women. About 33 per cent are reported to be under 21 years of age, about 17 per cent between the ages of 21 and 30 years, and about 50 per cent 30 years of age or over. During the year 1893 the persons who have applied have been almost entirely skilled; this, however, was not the case in 1892. The applicants in that year were about equally divided between skilled and unskilled. It is stated from the experience of this institution that during 1893 and the early months of 1894, music teachers, artists, and nurses, and women in all the higher branches of industry have been glad to obtain housework rather than to be entirely without employment.

The institution works in harmony with the Associated Charities. No method is used to determine the dearth of labor in particular localities. It is estimated that the number of applicants increased 50 per cent in 1893 over the previous year. The number of situations found during the winter of 1893 and 1894 included about 50 per cent of those who applied, while in 1892 and 1893 about 67 per cent were placed.

#### *Ruggles Street Church Employment Bureau.*

This agency is maintained by the Ruggles Street Baptist Church. Applicants are registered by name, and their residence, occupation, age, place of birth, conjugal condition, name and address of last employer, and the kind of work they were previously engaged in, are also put upon file. When an applicant receives work, the name of the employer is recorded. All kinds of labor are dealt with. No fee is charged applicants, and no method of investigation is pursued.

Employers are obtained by personal solicitation. The names of employers desiring help are put upon file, together with the date of the application, residence, kind of help wanted, wages offered, and number of persons in the family of the employer when domestic help is solicited. When a person is sent to a situation, the name of such person is entered on the employer's file book. No fee is charged employers, and no method of investigation of employers pursued. In 1893, 896 applications for work were received, but the number received during 1892 could not be obtained. The number of applications received in November and December, 1893, was considerably larger than in any of the other months of the year; and, generally speaking, the months of August, September, November, and December are the months in which applications are most numerous. In 1893, work was obtained for 407 applicants, of whom 199 were women who applied for, and occasionally received, work by the day. Many applicants apply to this agency for work and are never heard from again. As it costs nothing to file an application, it is frequently done, and not followed up. In such cases, the applicant is notified that it will be necessary, in order to obtain a place, to be present at the office from 9 to 12 daily, as situations may possibly be offered to which the applicant may be sent. If the applicant is not heard from within a few days after such notice, the name is erased from the file.

Most of the applicants are of Irish birth or from the British Provinces; very few are native born. About 12 per cent of the total number are males. Out of 697 recorded applicants, whose conjugal condition was noted, it was found that 131 were married, and of those who were married, neither sex preponderated. The estimated average age of applicants is 28 years. As a rule, the men who apply here are trained for the work requested, but the women are frequently untrained, especially the applicants for housework. About 75 per cent of all the applicants, whether males or females, are considered as trained. No method of communication is used with other employment agencies, nor is any method used to determine the dearth of labor in particular localities. The number of applicants during December 1893, January, February, and March, 1894, was very much larger than usual.

## INTELLIGENCE OFFICES.

Under this head we include all employment agencies which are conducted as private enterprises for the purpose of paying an income to those who conduct them. Offices of this sort in Massachusetts have, for many years, been subject to public control. Section 26 of Chapter 102 of the Public Statutes provides that "whoever, without a license therefor, establishes or keeps an intelligence office for the purpose of obtaining or giving information concerning places of employment for domestics, servants, or other laborers, except seamen, or for the purpose of procuring or giving information concerning such persons for or to employers, or for the purpose of procuring or giving information concerning employment in business, shall pay a fine of ten dollars for each day such office is so kept;" and by Section 27 of the same chapter it is provided that "the mayor and aldermen of any city, except Boston, and in Boston the police commissioners, and the selectmen of any town, may, for the purposes mentioned in the preceding section, grant licenses to suitable persons, subject to the provisions of Sections 124 to 127 inclusive, and may revoke the same at pleasure. They shall receive one dollar for each license so granted." The provisions of Sections 124 to 127 inclusive, referred to in this section, relate to the form of license, the manner in which it shall be recorded, etc., and the month in each year within which the license shall take effect. Licenses must be renewed annually. In Chapter 311 of the Acts of 1888 it is provided that "whoever as proprietor or keeper of an intelligence or employment office, either personally, or through an agent or employé, sends any woman or girl to enter (as an inmate or a servant) any house of ill-fame or other place resorted to for the purpose of prostitution, the character of which could have been ascertained by him on reasonable inquiry, shall for each offence be punished by fine of not less than fifty nor more than two hundred dollars."

The following table exhibits the number of licensed intelligence offices in the cities of Massachusetts, for the year ending May 1, 1894:



CITIES.	Number of Licensed Intelligence Offices	CITIES.	Number of Licensed Intelligence Offices
Boston, . . . . .	119	Marlborough, . . . . .	-
Brockton, . . . . .	3	Medford, . . . . .	2
Cambridge, . . . . .	18	New Bedford, . . . . .	5
Chelsea, . . . . .	6	Newburyport, . . . . .	2
Chicopee, . . . . .	*1	Newton, . . . . .	11
Everett, . . . . .	1	Northampton, . . . . .	2
Fall River, . . . . .	5	Pittsfield, . . . . .	3
Fitchburg, . . . . .	3	Quincy, . . . . .	3
Gloucester, . . . . .	-	Salem, . . . . .	7
Haverhill, . . . . .	†-	Somerville, . . . . .	9
Holyoke, . . . . .	2	Springfield, . . . . .	12
Lawrence, . . . . .	4	Taunton, . . . . .	2
Lowell, . . . . .	11	Waltham, . . . . .	-
Lynn, . . . . .	5	Woburn, . . . . .	2
Malden, . . . . .	5	Worcester, . . . . .	12

\* Licensed in March, 1894.      † One granted for the year beginning May, 1894.

Acting under the general provisions empowering the issuing of licenses, it has been customary in the city of Boston for the police commission to attach certain conditions to the license, one of the most important of which relates to the subject of fees. This condition is as follows :

Every licensed keeper of an intelligence office shall be entitled to receive of each female, at the time of application for a place, a sum not exceeding fifty cents ; and of each male who may make such application a sum not exceeding one dollar ; and of each person making application for female servants a sum not exceeding fifty cents, and for a male servant a sum not exceeding one dollar, for which a receipt shall be given at the time ; and in case no servant or place of employment is obtained within six days from the date of payment, the money should be refunded, except as follows : If either male or female shall be sent to a situation, and make an engagement, and go to work, and for any reason shall not remain at the place, neither party shall be entitled to have the pay returned.

The Board of Police also prescribes a form of receipt to be given to male applicants for situations, which is as follows :

Received of Mr. \_\_\_\_\_ one dollar in advance to pay for procuring him a situation for work ; said amount to be refunded to him, on presentation of this receipt, if no situation is obtained for him at the expiration of six days from this date.



The receipt, of course, bears date, showing time of payment.

In the city of Cambridge a similar rule relating to fees has been established by the Board of Aldermen, but outside the cities of Boston and Cambridge it has not been customary to attach any such condition to licenses.

The Legislature, at its recent session, however, has enacted a law which will apply to all intelligence offices hereafter conducted in the Commonwealth. The provisions of this law are as follows :

SECTION 1. The keeper of an intelligence office shall not receive or accept any sum of money from a person seeking employment through the agency of such office, unless employment of the kind demanded is furnished.

SECTION 2. If a person receiving employment through the agency of an intelligence office is discharged by his employer within ten days from the time of entering upon such employment, and such discharge is not caused by the inability, incompetency or refusal of such person to perform the work required, or by other fault of the person employed, the keeper of such intelligence office shall refund to such person on demand five-sixths of any sum paid to such keeper by the employer on account of such employment.

SECTION 3. The officers of towns and cities charged with the duty of granting licenses to keepers of intelligence offices shall cause this act to be printed on each such license. They shall also cause to be prepared and shall furnish to each keeper of a licensed intelligence office copies of this act, printed upon cardboard in type of a size not smaller than pica, and each licensee shall conspicuously post in each room occupied by him for the purpose of such intelligence office, three of said printed copies.

SECTION 4. If a keeper of an intelligence office violates any of the provisions of this act his license shall be revoked, and he shall be punished by fine of not less than twenty-five dollars, nor more than fifty dollars for each offence.

The intent of the law is to prevent the keeper of an intelligence office from collecting a fee from a person who seeks a place unless actual employment is found, and it limits the amount of the fee which may be charged in case the employment proves of a temporary nature, from causes not due to the inability, incompetency, or refusal of the person for whom the situation is found to perform the work required, and the act unless

evaded, makes every intelligence office a free office unless employment is secured.

Besides the employment agencies which are generally recognized as intelligence offices, there are a few which deal with special kinds of employment, or aim to provide employment for persons of special training, which operate without a license, not being classed as intelligence offices. These establishments deal principally with mercantile or professional employments. The statute first quoted provides that a license must be obtained for keeping an intelligence office “for the purpose of obtaining or giving information concerning places of employment for domestics, servants, or other laborers, except seamen, . . . or *for the purpose of procuring or giving information concerning employment in business.*” So far as any employment agency aims to provide places in mercantile employment, it is difficult to see why this language does not make such an office an intelligence office. Whether an agency which deals with persons engaged in professional work only, such, for instance, as teachers, can be classed as an office furnishing information as to employment in business may, perhaps, be open to question; but the statute apparently does not restrict the term “intelligence office” to offices which deal only with particular kinds of employment. Nevertheless, a few establishments which, as we have said, deal with special kinds of employments, are not at present required to obtain licenses. The most important offices of this class are the agencies aiming to secure employment for teachers. In general, these supply male and female teachers for all grades of schools, charging a registration fee, usually about two dollars, which entitles the applicant to registration for a fixed period of time, for instance, two years, unless a position is previously secured. Upon accepting any position, applicants agree to make an additional payment amounting to a certain percentage of a year’s salary; for instance, five per cent.

The usual form of contract in employment agencies of this character includes certain definite provisions, nearly all of which relate to fixing the terms upon which the applicant is to pay this subsequent fee after securing a position; and, in general, the percentage is to be computed upon a full year’s salary, irrespective of the length of an engagement. Applicants for

positions as teachers are usually investigated as to their previous success in teaching, and as to their character and qualifications for the work. Employers are solicited by advertisement and are never charged a fee. Applicants are most numerous between the months of March and October. A single agency of this class estimates the number of female applicants at 60 per cent of the total, the majority of the women being single. Of the males who apply, the proportions of married and single are about equal. The majority are very well trained for the work they seek. The proportion of applicants to places in 1893 was about two to one. Teachers' employment agencies are of comparatively recent origin and have a large clientage, both among persons seeking employment and among school officers who desire to fill vacancies.

Besides the teachers' agencies, there are several establishments aiming to supply persons for situations in mercantile establishments, and, in some cases, to guarantee fidelity in employés, by furnishing bonds. This last feature of the business is, however, incidental, and does not apply to all those who are placed in situations. The rate of fees in these offices varies. In some, the fee for a permanent position is practically equivalent to one week's pay; but if the position is temporary, a smaller fee is charged, being usually a fixed proportion of the amount of money earned. Applicants are usually carefully investigated, and, besides being required to furnish references, a blank is sent to previous employers with the request to supply information in confidence, showing fully the capacity and character of the applicant. Employers are obtained through advertisement and by personal application, and are not usually charged a fee. Sometimes however, where the applicant's fee is limited, the employer is also charged a small fee. In establishments of this class male applicants predominate, returns to this office indicating 60 per cent males and 40 per cent females. Persons of native birth also predominate, and the majority of applicants are single. Four leading agencies of this class report the aggregate number of applications in 1893 as 197,750, while the number of places supplied was 9,428. It will be understood that the number of applications is not identical with the number of applicants, as the same person frequently applies at several agencies, and therefore is necessarily counted

more than once. One establishment reports April, May, June, and July as the months in which the applications are most numerous; two others return September, October, and November; while the fourth replies that, as to mercantile help, applications range about the same month by month throughout the year.

The intelligence offices operating under a license are conducted in substantially the same manner throughout the Commonwealth, and deal largely with domestic labor and with employes in restaurants, hotels, upon farms, and in general labor service. Returns have been secured from 98 offices in the city of Boston, including all in operation at the date of inquiry, some of those licensed, as shown in the table, page 107, having gone out of business. Of these, two deal exclusively with male help, 40 with females only, and 56 with both sexes. Males find places principally as bell boys, coachmen, general farm and hotel work, gardeners, domestic service, laborers, stablemen, and teamsters; while females are placed principally in domestic and personal service in families, hotels, and restaurants. It was impossible to obtain accurate statistics showing the number of applicants and the number of places filled by all of these offices. Estimates however from 87 establishments place the number of applicants during the year 1893 at 600,934, and the number of places filled 128,912; that is to say, the number of places filled represented 21.45 per cent of the number of applications. In 15 establishments the number of applications during the year 1892 was 186,313, rising to 207,161 in 1893. In 1892 in the same establishments the number of places filled was 28,862, falling in 1893 to 20,308; that is, the places filled constituted 15.49 per cent of the applications in 1892 and 9.80 per cent in 1893. This, of course, reflects the influence of the industrial depression during the last half of the year 1893. Eight establishments furnished the Bureau with the number of applications and places filled during the months of January, February, and March, 1894. In these establishments the number of applications aggregated 10,024, while the number of places filled was but 493, or 4.92 per cent of the number of applications. It should not be forgotten that the number of applications does not represent individual applicants, for the reason that, as previously stated with respect to another class of employment agencies, the same applicant is

frequently registered in more than one office. Applications are most numerous during the months of April, May, June, September, October, and November. Seventy offices reported a larger number of applications from December 1, 1893 to March 31, 1894 than during the corresponding period in the preceding years; nine other offices reported the same number of applications during each of the periods named; while three others reported a smaller number of applications. Of the offices reporting more applications in 1893 and 1894 than in 1892 and 1893, 45 made only the simple statement that the number of applications was greater; seven considered the number of applications as 200 per cent greater; six, 50 per cent greater; three, 25 per cent greater; three, 33.33 per cent greater; two, 40 per cent greater; two, 500 per cent greater; one, 75 per cent greater; and one, 400 per cent greater. Two offices reported that the number of places secured from December 1, 1893 to March 31, 1894 was greater than the number of places secured during the corresponding period in the preceding years; five others replied that the number of places was the same during each of the periods named; while 74 stated that the number of places was less in the last named than in the first named period. Of the offices which reported a less number of places secured in 1893 and 1894 than in 1892 and 1893, 54 gave no indication of the difference in proportions; eight stated that the number was 50 per cent less; three, 67 per cent less; one, 89 per cent less; one, 20 per cent less; one, 10 per cent less; five, 25 per cent less; and one, 37.50 per cent less. The majority of the applicants are unmarried, only one establishment reporting otherwise.

In 52 establishments out of 98 making returns, Irish applicants predominate; in four, persons born in Nova Scotia are in excess; in six others, Scandinavians lead; in six others, colored applicants are in excess. Three establishments only, report that persons of American birth predominate among the applicants. In one establishment Germans lead; in one Hebrews; in one Scotch; and in all others various nationalities are represented, chiefly Irish, Swedes, French, and persons born in the British Provinces. The majority of the applicants are under 40 years of age. In general, applicants are brought

directly into contact with employers, and it is left for the employer to determine the character of the applicant, and to satisfy himself as to the validity of references. If requested, the offices will investigate references, but no general system of such investigation prevails. The investigation, if entered upon, usually consists in sending by mail to the person for whom the applicant last worked a request for a statement as to qualifications and character. Some offices are much more strict than others as regards the kind of references which applicants for employment are required to furnish.

Employers, as a rule, are not investigated. In many cases they are known to the persons who conduct the office and are considered regular patrons. In general, care is taken not to send applicants for employment to questionable places, and the offices intend to comply, so far as the exercise of good judgment and ordinary care make it possible, with the statutory provisions against sending female applicants to improper places. The personal appearance of those who request employes is taken into account by the managers of the office if the persons are unknown; the locality where the applicant for help resides is considered to have some bearing upon the probable nature of the place if domestic service is required; and if intending employers are mistrusted, either with respect to the character of the place offered, or for any other reason, they are investigated. The persons placed in situations are requested to report to the office if anything improper is found to be connected with the place, either as to the nature of the work, or if the employer is not prompt with respect to payment of wages; but, as stated before, no general system obtains in regard to these matters, and the offices have no means of communication with one another.

Apparently, nothing whatever is done to determine the dearth of labor in particular localities. As will be seen from the statistics previously presented, the number of applicants is always greatly in excess of the number of places in which it is possible to place them. The offices advertise through the press and in other ways so as to attract intending employers and also those who desire places. Many offices have a regular clientage both among the employing and the working classes.



## CURRENT STATISTICAL MATTER RELATING TO LOCAL CONDITIONS.

### UNEMPLOYMENT IN MASSACHUSETTS.

The extent of employment under normal conditions in the factory industries is quite accurately determined in Massachusetts, and, notwithstanding seasonal depressions, is much more uniform than is generally supposed. Thus, taking all industries in the aggregate during the year 1892, the percentage of unemployment did not rise above 4.45 in any month, and if the single month, January, in which that percentage was reached, be eliminated, it did not exceed 2.98 per cent of the maximum number of employes enrolled, and did not greatly vary month by month.

The facts as to unemployment in all occupations, under conditions which may be regarded as normal, are best shown by the results of a special investigation conducted by the Bureau, in connection with the Decennial Census, and published in its report for 1887. The data were obtained by a complete poll of the persons nominally employed in gainful pursuits in the Commonwealth, that is to say, by a house to house canvass carefully conducted in connection with the census enumeration, from which was ascertained the number of months during the entire year in which each person was unemployed, if at all, in the occupation upon which he chiefly depended for a livelihood, the inquiry being applicable to every such person, whether male or female, if nominally engaged for hire. The returns, therefore, included all persons engaged in the government service, whether national, state, city, town, or county; all professional persons; all persons engaged in domestic and personal service for hire; all persons employed in trade, transportation, agriculture, the fisheries, or in manufactures, unemployment being in each case properly classified as regards each occupation in presenting results. No investigation so complete as this, with reference to the employment of large numbers of persons, was ever previously undertaken, statements with respect to unemployment being usually based upon canvasses covering periods of depression only, and including comparatively small numbers of persons.

The results of this investigation showed that the persons who were unemployed during some portion of the year represented 29.59 per cent of the total number of persons employed in gainful occupations; while 70.41 per cent were employed during the entire year. It was also found that unemployed persons were unemployed at their principal occupation, on the average, 4.11 months, while if the amount of unemployment be mathematically distributed among the total number of persons employed in every kind of gainful occupation, whether employed or unemployed, the average unemployment during the year was 1.22 months. In other words, it was shown that a little less than one-third of the persons engaged in remunerative labor were unemployed for about one-third of their working time; while, on the other hand, the persons engaged in gainful occupations were employed at their principal occupation a little less than 11 months during the year. If the number of persons returned as unemployed be compared with the whole number of persons employed in gainful occupations, it will be found that the proportion obtains of one unemployed person in every 3.38 persons, the unemployment being, as stated, in the principal occupation, during some part of the year. From what has been said, it will be clear that all the persons returned as unemployed were not actually unemployed during the entire 12 months, or that the total number of persons unemployed were out of employment at any one time during the year. In fact, the total number of unemployed persons who were returned as having been unemployed during the entire 12 months was but 822, representing a little more than one-third of one per cent of the persons returned as unemployed, and only one-tenth of one per cent of the total number of persons engaged in gainful occupations.

The exact extent of unemployment can hardly be seen from the figure representing the average term of unemployment, as such an average, if unanalyzed, is rather misleading. The following analysis table brings out the facts more clearly:



CLASSIFICATION OF TIME UNEMPLOYED.	MALES		FEMALES		BOTH SEXES	
	Number	Percent- ages	Number	Percent- ages	Number	Percent- ages
Unemployed 1 month, . .	12,948	2.14	6,630	3.12	19,578	2.40
Unemployed 2 months, . .	32,753	5.42	15,022	7.07	47,775	5.85
Unemployed 3 months, . .	30,138	4.99	11,739	5.52	41,877	5.13
Unemployed 4 months, . .	37,806	6.26	9,618	4.52	47,424	5.81
Unemployed 5 months, . .	12,890	2.14	3,357	1.58	16,247	1.99
Unemployed 6 months, . .	33,336	5.52	9,478	4.46	42,813	5.24
Unemployed 7 months, . .	4,600	0.76	1,538	0.72	6,138	0.75
Unemployed 8 months, . .	5,335	0.88	1,831	0.86	7,166	0.88
Unemployed 9 months, . .	3,739	0.62	1,581	0.74	5,320	0.65
Unemployed 10 months, . .	2,843	0.47	1,310	0.62	4,153	0.51
Unemployed 11 months, . .	1,488	0.25	788	0.37	2,276	0.28
Unemployed the entire year, .	753	0.13	69	0.03	822	0.10
Continuously employed, . .	425,219	70.42	149,662	70.39	574,881	70.41
TOTALS, . . . . .	603,847	100.00	212,623	100.00	816,470	100.00

This table at once discloses the fact that out of 816,470 persons, the total number returned as engaged in gainful pursuits during the year covered by the inquiry, 2.40 per cent were unemployed for one month, 5.85 per cent for two months, 5.13 per cent for three months, 5.81 per cent for four months, 1.99 per cent for five months, and 5.24 per cent for six months, while only fractional percentages of the entire number were unemployed for a period in excess of six months, and 70.41 per cent were continuously employed during the entire year. It will be noted that the percentages of unemployment do not greatly differ between the sexes.

These percentages cover the entire Commonwealth, and while they may be accepted as fairly representing the normal conditions during an entire year, this should be qualified by the statement that production in certain manufacturing industries, particularly Boots and Shoes and Cotton Goods, was not quite up to its usual limit during the year selected for the investigation, although it was not, so far as Massachusetts is concerned, a year of extended industrial depression. It is not unusual in any year to find certain industries which, for reasons peculiar to themselves, are somewhat depressed as compared with other years, or as compared with other industries in the same year. The percentages of unemployment for the State as a whole are, however, somewhat larger than for the city of Boston in which varied occupations are represented, and em-

ployment is not entirely dependent on the condition of any particular manufacturing industry.

The following table exhibits the results of the investigation for the city of Boston alone :

CLASSIFICATION OF TIME UNEMPLOYED.	Number	Percentages
Unemployed 1 month, . . . . .	1,224	0.72
Unemployed 2 months, . . . . .	5,618	3.30
Unemployed 3 months, . . . . .	5,206	3.07
Unemployed 4 months, . . . . .	7,142	4.20
Unemployed 5 months, . . . . .	2,449	1.44
Unemployed 6 months, . . . . .	5,961	3.51
Unemployed 7 months, . . . . .	785	0.46
Unemployed 8 months, . . . . .	940	0.55
Unemployed 9 months, . . . . .	799	0.47
Unemployed 10 months, . . . . .	569	0.34
Unemployed 11 months, . . . . .	370	0.22
Unemployed the entire year, . . . . .	204	0.12
Continuously employed, . . . . .	138,623	81.60
TOTALS, . . . . .	169,836	100.00

From this table it will be noted that 81.60 per cent of the entire number of persons engaged in remunerative occupations in the city were continuously employed during the entire year, as against 70.41 per cent thus employed in the Commonwealth as a whole ; while the number unemployed for one month formed but 0.72 per cent of the aggregate number in remunerative occupations ; those unemployed for two months, 3.30 per cent ; for three months, 3.07 per cent ; four months, 4.20 per cent ; five months, 1.44 per cent ; and those unemployed for six months, 3.51 per cent, percentages which, in every case, are smaller than the corresponding percentages for the Commonwealth as a whole.

The percentages of unemployed persons in the principal occupations, as disclosed by the investigation for the State at large, is shown in the following table :

SEX AND OCCUPATIONS.	Total Persons Employed in Gainful Oc- cupations	UNEMPLOYED PERSONS	
		Number	Percent- ages
<i>Males.</i>	603,847	178,028	100.00
Merchants and dealers, . . . . .	33,566	1,367	0.77
Salesmen, . . . . .	14,936	1,041	0.58
Bookkeepers and clerks, . . . . .	27,667	2,020	1.13
Longshoremen, . . . . .	1,819	1,504	0.84
Teamsters, . . . . .	14,018	2,144	1.20
Steam railroad employes, . . . . .	15,086	1,733	0.97
Mariners and master mariners (sailing), . . . . .	3,590	1,140	0.64
Farmers, . . . . .	36,269	2,504	1.40
Farm laborers, . . . . .	35,633	10,759	6.02
Gardeners and assistants, . . . . .	2,960	1,230	0.74
Fishermen, . . . . .	7,844	3,452	1.93
Boot and shoe makers, . . . . .	48,105	32,374	18.12
Brickmakers, . . . . .	1,954	1,205	0.67
Carpenters, . . . . .	22,781	10,747	6.02
Masons, . . . . .	8,362	5,789	3.24
Painters, . . . . .	9,352	5,176	2.90
Carriage makers,* . . . . .	4,774	1,581	0.80
Cotton mill operatives, . . . . .	26,642	10,414	5.83
Furniture makers,† . . . . .	7,307	2,028	1.14
Tannery employes and morocco workers, . . . . .	7,993	3,039	1.70
Machinists and machine shop employes, . . . . .	12,461	3,816	2.14
Blacksmiths and helpers, . . . . .	5,858	1,040	0.58
Iron workers, . . . . .	5,731	2,864	1.60
Jewelry makers, . . . . .	3,121	2,039	1.14
Nail and tack makers, . . . . .	1,652	1,153	0.65
Wire workers, . . . . .	2,621	1,122	0.63
Print works, dye works, and bleachery operatives, . . . . .	3,166	1,236	0.69
Rubber factory operatives, . . . . .	2,697	1,276	0.71
Stone workers,‡ . . . . .	4,418	1,510	0.85
Straw workers, . . . . .	1,862	1,108	0.62
Woollen mill operatives, . . . . .	13,559	5,332	2.99
Laborers, . . . . .	33,064	20,346	11.39
Apprentices, . . . . .	5,214	1,102	0.62
All other occupations, . . . . .	178,224	33,337	18.66
<i>Females.</i>	212,623	62,961	100.00
Music teachers, . . . . .	1,784	330	0.56
Teachers, . . . . .	9,979	4,948	7.86
Servants (in families), . . . . .	48,637	3,300	5.24
Laundry work, . . . . .	4,862	1,169	1.86
Nurses, . . . . .	3,080	980	1.56
Saleswomen, . . . . .	3,829	449	0.71
Bookkeepers and clerks, . . . . .	5,374	494	0.78
Boot and shoe makers, . . . . .	14,420	10,250	16.28
Paper box makers, . . . . .	1,426	616	0.98
Watchmakers, . . . . .	1,025	411	0.65

\* Includes carriage blacksmiths, makers, painters, trimmers, and wheelwrights and wheel makers.

† Includes cabinet makers, chair makers, rattan furniture makers, other furniture makers, and upholsterers.

‡ Includes marble workers, granite workers, and stone workers (not specified).

SEX AND OCCUPATIONS.	Total Persons Employed in Gainful Oc- cupations	UNEMPLOYED PERSONS	
		Number	Percent- ages
Dressmakers, . . . . .	13,290	3,188	5.06
Milliners, . . . . .	2,218	609	0.97
Seamstresses, . . . . .	3,783	1,011	1.61
Tailloresses, . . . . .	4,466	1,473	2.34
Cotton mill operatives, . . . . .	31,741	13,836	21.98
Footery mill operatives, . . . . .	2,320	941	1.49
Jewelry makers, . . . . .	641	513	0.81
Paper mill operatives, . . . . .	3,556	756	1.20
Bookbindery employes, . . . . .	1,108	376	0.60
Rubber factory operatives, . . . . .	1,767	970	1.54
Silk mill operatives, . . . . .	1,419	754	1.20
Straw workers, . . . . .	3,239	3,083	4.90
Woollen mill operatives, . . . . .	9,176	4,131	6.56
Worsted mill operatives, . . . . .	1,720	801	1.27
All other occupations, . . . . .	37,773	7,562	11.99

It should be stated that while the number of persons employed in gainful occupations in Massachusetts has doubtless increased proportionately with the increase of population \* since the date of the investigation from which the statistics contained in this, and in the preceding tables were derived, the returns annually made from the different industries afford no indication that the percentages of unemployment, under usual conditions, have materially increased since that time.

Analyzing the table as to the sexes, we find that boot and shoe makers constituted 18.12 per cent of the total unemployed males, this industry being one which is more subject to seasonal depressions than most factory industries, and which, as we have said, was suffering from a temporary depression during the year of the investigation. Laborers, using that term in its restricted sense as implying unskilled workers, constituted 11.39 per cent of the unemployed males; farm laborers, 6.02 per cent; carpenters, 6.02 per cent; cotton mill operatives, 5.83 per cent; masons, 3.24 per cent; woollen mill operatives, 2.99 per cent; and painters, 2.90 per cent, these occupations representing an aggregate of 56.51 per cent of the unemployed males. Of the total unemployed females, 21.98 per cent were cotton mill operatives; 16.28 per cent were boot and shoe makers; 7.86 per cent were teachers; 6.56 per cent were

\* Approximately 27.50 per cent.

woollen mill operatives; 5.24 per cent were servants (in families); 5.06 per cent were dressmakers; and 4.90 per cent were straw workers; these, together, constituting an aggregate of 67.88 per cent of the unemployed females.

In the following table, the unemployed are shown by classified occupations:

THE STATE, AND CLASSIFIED OCCUPATIONS.	NUMBER AND PERCENTAGES OF UNEMPLOYED PERSONS					
	MALES		FEMALES		BOTH SEXES	
	Number	Percent- ages	Number	Percent- ages	Number	Percent- ages
THE STATE.	178,628	100.00	62,961	100.00	241,589	100.00
Government and professional, .	2,190	1.22	5,717	9.08	7,907	3.27
Domestic service, . . . . .	928	0.52	3,986	6.33	4,914	2.03
Personal service, . . . . .	1,637	0.92	2,509	3.99	4,146	1.72
Trade, . . . . .	8,262	4.62	1,247	1.98	9,509	3.94
Transportation, . . . . .	7,014	3.93	19	0.03	7,033	2.91
Agriculture, . . . . .	15,130	8.47	35	0.06	15,165	6.28
Fisheries, . . . . .	3,533	1.98	8	-	3,536	1.46
Manufactures, . . . . .	117,792	65.94	49,249	78.22	167,041	69.14
Mining, . . . . .	694	0.39	-	-	694	0.29
Laborers, . . . . .	20,346	11.39	15	0.02	20,361	8.43
Apprentices, . . . . .	1,102	0.62	181	0.29	1,283	0.53

From this classification, we find that, of the total number of unemployed persons, 3.27 per cent were engaged in government and professional service; 2.03 per cent were persons engaged in domestic service; 1.72 per cent were persons engaged in personal service; 3.94 per cent, persons engaged in trade; 2.91 per cent, persons engaged in transportation; 6.28 per cent, persons engaged in agriculture; 1.46 per cent, persons engaged in the fisheries; 69.14 per cent, persons engaged in manufactures; 8.43 per cent were unskilled laborers; and only fractional percentages were found in other occupations.

These figures as to unemployment, we repeat, related to the principal occupation of the employé. The investigation, however, comprehended the determination of the net average time unemployed at any kind of work, not only as regards the unemployed persons as a whole, but also for persons unemployed in particular occupations. As a result, 10,758 persons unemployed at their principal occupations were returned as having been engaged at some other work during this period of unemployment, the particular kind of work not being desig-

nated, but considered simply as "other occupation." Making an allowance for this other occupation, the following table presents the net average unemployment in months, by sex, for the unemployed persons, and for all persons employed in gainful occupations :

THE STATE, AND SEX.	AVERAGE MONTHS UNEMPLOYED AT PRINCIPAL OCCUPATION				AVERAGE MONTHS EMPLOYED AT "OTHER OCCUPATION"		NET AVERAGE MONTHS UNEMPLOYED	
	ALL PERSONS		UNEMPLOYED PERSONS		Number of Persons	Average Months	All Persons	Unemployed Persons
	Number	Average Months	Number	Average Months				
THE STATE.	816,470	1.22	241,589	4.11	10,758	4.62	1.16	3.91
Males, . . . . .	603,847	1.24	178,028	4.18	9,917	4.61	1.16	3.93
Females, . . . . .	212,623	1.16	62,961	3.91	841	4.75	1.14	3.85

Expressed in terms of percentages, the net average unemployment for all unemployed persons during the year was 3.91 months, and did not greatly vary between the sexes. The net average term of unemployment, if based upon the total number of persons engaged in gainful occupations, was 1.16 months, and did not greatly vary between the sexes.

Returns made annually to the Bureau from the principal manufacturing establishments in the State, definitely show the percentages of unemployment, month by month, beginning with January, 1889, and closing with December, 1893.

These percentages for the nine leading industries and for all industries in the aggregate are presented in the following table :

INDUSTRIES AND MONTHS.	PERCENTAGES OF EMPLOYMENT DURING THE MONTHS SPECIFIED IN —					PERCENTAGES OF UNEMPLOYMENT DURING THE MONTHS SPECIFIED IN —				
	1889	1890	1891	1892	1893	1889	1890	1891	1892	1893
BOOTS AND SHOES.										
January, . . . . .	90.61	89.60	97.93	92.65	96.65	9.39	10.40	2.07	7.35	3.35
February, . . . . .	92.95	91.16	99.53	94.75	98.15	7.05	8.84	0.47	5.25	1.85
March, . . . . .	94.08	91.57	99.47	95.92	100.00	5.92	8.43	0.53	4.08	—
April, . . . . .	93.51	91.46	97.18	96.32	99.39	6.49	8.54	2.82	3.68	0.61
May, . . . . .	94.41	93.41	98.87	98.03	98.99	5.59	6.59	1.13	1.97	1.01
June, . . . . .	96.72	96.94	99.21	98.24	94.28	3.28	3.06	0.79	1.76	5.72
July, . . . . .	97.01	96.48	97.53	98.01	84.71	2.99	3.52	2.47	1.99	15.29
August, . . . . .	100.00	100.00	100.00	99.95	80.74	—	—	—	0.05	19.26
September, . . . . .	98.85	99.29	99.09	100.00	80.31	1.15	0.71	0.91	—	19.69
October, . . . . .	97.09	97.10	96.35	99.32	80.42	2.91	2.90	3.65	0.68	19.58
November, . . . . .	93.87	92.33	91.25	97.00	79.08	6.13	7.67	8.75	3.00	20.92
December, . . . . .	93.77	90.24	95.04	96.30	80.38	6.23	9.76	4.96	3.70	19.62

INDUSTRIES AND MONTHS.	PERCENTAGES OF EMPLOYMENT DURING THE MONTHS SPECIFIED IN—					PERCENTAGES OF UNEMPLOYMENT DURING THE MONTHS SPECIFIED IN—				
	1899	1900	1901	1902	1903	1899	1900	1901	1902	1903
<b>CARPETINGS.</b>										
January, . . .	95.61	97.56	98.62	95.09	98.58	4.39	2.44	1.38	4.91	1.42
February, . . .	95.18	100.00	99.58	96.10	99.18	4.82	—	0.42	3.90	0.82
March, . . .	97.43	99.47	100.00	96.81	99.50	2.57	0.53	—	3.19	0.50
April, . . .	97.64	98.34	97.68	95.60	99.16	2.36	1.66	2.32	4.40	0.84
May, . . .	85.88	97.56	95.63	95.15	99.12	14.12	2.44	4.37	4.85	0.88
June, . . .	96.17	97.92	96.61	97.41	100.00	3.83	2.08	3.39	2.59	—
July, . . .	96.56	97.75	95.96	99.22	98.48	3.44	2.25	4.04	0.78	1.52
August, . . .	96.63	97.07	95.55	97.53	78.37	1.37	2.93	4.45	2.47	26.63
September, . . .	100.00	98.79	96.19	98.77	87.35	—	1.21	3.81	1.23	62.65
October, . . .	96.53	99.89	94.21	100.00	71.95	1.42	0.11	5.79	—	28.05
November, . . .	95.79	98.53	96.97	94.94	82.73	4.21	1.47	3.03	5.06	17.27
December, . . .	95.77	99.17	95.96	94.80	82.89	4.23	0.83	4.04	5.20	17.11
<b>COTTON GOODS.</b>										
January, . . .	98.06	97.70	99.44	98.09	98.40	1.95	2.30	0.56	1.91	1.60
February, . . .	98.52	98.47	99.38	99.44	98.67	1.48	1.53	0.62	0.56	1.33
March, . . .	97.19	98.26	99.34	99.58	97.66	2.81	1.74	0.66	0.42	2.34
April, . . .	98.71	98.56	99.09	99.81	99.87	1.29	1.44	0.91	0.19	0.13
May, . . .	98.76	98.29	98.62	99.61	100.00	1.24	1.71	1.38	0.39	—
June, . . .	98.66	98.40	98.40	98.94	99.57	1.34	1.60	1.51	1.06	0.43
July, . . .	98.99	97.20	98.61	98.53	99.25	1.01	2.80	1.39	1.47	0.75
August, . . .	99.09	97.65	98.25	98.48	84.74	0.91	2.35	1.75	1.52	15.26
September, . . .	99.44	98.52	98.63	98.67	77.80	0.56	1.48	1.37	1.33	22.20
October, . . .	99.86	99.70	99.41	98.93	94.33	0.14	0.30	0.59	1.07	5.67
November, . . .	100.00	99.83	99.95	99.40	95.49	—	0.17	0.05	0.60	4.51
December, . . .	99.95	100.00	100.00	100.00	96.06	0.05	—	—	—	4.94
<b>LEATHER.</b>										
January, . . .	95.82	91.32	94.29	87.44	97.87	4.18	8.68	5.71	12.56	2.13
February, . . .	98.39	96.24	98.07	90.13	98.40	1.61	3.76	1.93	9.87	1.60
March, . . .	100.00	96.33	100.00	94.05	99.80	—	3.67	—	5.95	0.20
April, . . .	98.29	97.50	98.72	98.90	100.00	1.71	2.50	1.28	6.10	—
May, . . .	98.53	97.65	96.23	94.59	96.23	1.47	2.35	3.77	5.41	3.77
June, . . .	99.21	100.00	95.25	94.79	89.88	0.79	—	4.75	5.21	10.12
July, . . .	96.53	99.98	92.76	95.06	76.80	3.47	0.02	7.24	4.94	23.20
August, . . .	97.68	99.55	92.84	93.64	65.79	2.32	0.45	7.16	6.36	34.21
September, . . .	96.90	92.59	90.54	93.23	64.68	3.10	7.41	9.46	6.77	35.32
October, . . .	96.34	91.47	93.26	94.69	70.18	3.66	8.53	6.74	5.31	29.82
November, . . .	97.45	91.44	93.93	98.09	71.52	2.55	8.56	6.07	1.91	28.48
December, . . .	90.99	90.12	94.85	100.00	77.69	9.01	9.88	5.15	—	22.31
<b>MACHINES AND MA- CHINERY.</b>										
January, . . .	95.59	91.90	98.45	91.85	98.00	4.41	8.10	1.55	8.15	2.00
February, . . .	95.37	91.39	97.52	91.71	98.58	4.63	8.61	2.48	8.29	1.42
March, . . .	96.85	91.67	97.48	91.15	100.00	3.15	8.33	2.52	8.85	—
April, . . .	95.51	92.18	98.53	92.93	97.56	4.49	7.82	1.47	7.07	2.44
May, . . .	96.30	92.01	98.41	92.33	97.52	3.70	7.99	1.59	7.67	2.48
June, . . .	96.55	92.15	98.35	92.78	94.79	3.45	7.85	1.65	7.22	5.21
July, . . .	98.46	92.69	97.62	94.26	91.95	1.54	7.31	2.38	5.74	8.05
August, . . .	99.14	93.75	97.59	96.14	84.49	0.86	6.25	2.41	3.86	15.51
September, . . .	99.68	95.85	98.77	96.74	78.73	0.42	4.15	1.23	3.26	21.27

INDUSTRIES AND MONTHS.	PERCENTAGES OF EMPLOYMENT DURING THE MONTHS SPECIFIED IN—					PERCENTAGES OF UNEMPLOYMENT DURING THE MONTHS SPECIFIED IN—				
	1889	1890	1891	1892	1893	1889	1890	1891	1892	1893
<b>MACHINES AND MA- CHINERY—Con.</b>										
October, . . .	100.00	98.85	100.00	98.08	77.08	-	1.15	-	1.92	22.92
November, . . .	99.86	100.00	99.72	99.55	75.04	0.14	-	0.28	0.45	24.96
December, . . .	99.67	99.53	99.32	100.00	74.22	0.33	0.47	0.68	-	25.78
<b>METALS AND ME- TALLIC GOODS.</b>										
January, . . .	93.86	95.53	94.83	92.60	97.73	6.14	4.47	5.17	7.40	2.27
February, . . .	93.77	95.34	94.74	93.02	97.83	6.23	4.66	5.26	6.98	2.17
March, . . .	93.35	95.53	94.30	93.50	99.01	6.65	4.47	5.70	6.50	0.99
April, . . .	92.28	94.86	94.79	94.13	100.00	7.72	5.14	5.21	5.87	-
May, . . .	91.37	94.88	94.44	95.33	99.92	8.63	5.12	5.56	4.67	0.08
June, . . .	92.48	95.37	94.14	95.17	98.20	7.52	4.63	5.86	4.83	1.80
July, . . .	91.61	94.47	94.70	93.86	89.49	8.39	5.53	5.30	6.64	10.51
August, . . .	92.98	96.98	94.99	94.85	86.30	7.02	4.02	5.01	5.15	13.70
September, . . .	97.44	97.98	97.40	96.52	83.10	2.56	2.02	2.60	1.48	16.90
October, . . .	99.76	99.29	100.00	100.00	86.13	0.24	0.71	-	-	13.87
November, . . .	100.00	99.82	99.96	99.81	85.25	-	0.18	0.04	0.69	14.75
December, . . .	99.76	100.00	99.40	99.77	83.56	0.24	-	0.60	0.23	16.44
<b>PAPER AND PAPER GOODS.</b>										
January, . . .	98.96	95.71	98.89	94.62	98.22	1.04	4.29	1.61	5.38	1.78
February, . . .	99.20	96.01	98.53	95.43	93.91	0.80	3.99	1.47	4.57	1.09
March, . . .	98.43	96.11	98.78	97.14	99.90	1.57	3.89	1.22	2.86	0.10
April, . . .	92.30	96.27	98.29	97.58	100.00	7.70	3.73	1.71	2.42	-
May, . . .	98.96	96.57	98.61	97.68	99.62	1.04	3.43	1.39	2.32	1.38
June, . . .	100.00	96.61	98.20	96.29	97.76	-	3.39	1.80	1.71	2.24
July, . . .	99.15	95.61	97.42	98.31	94.96	0.85	4.39	2.58	1.69	5.04
August, . . .	97.75	95.95	96.52	97.17	88.89	2.25	4.05	3.48	2.83	11.11
September, . . .	98.65	97.25	98.17	98.24	86.00	1.35	2.75	1.83	1.76	14.60
October, . . .	99.05	98.25	99.38	100.00	86.83	0.95	1.75	0.62	-	13.17
November, . . .	98.92	99.00	100.00	99.78	87.98	1.08	1.00	-	0.22	12.02
December, . . .	98.57	100.00	99.23	99.77	89.33	1.43	-	0.77	0.23	10.67
<b>WOOLLEN GOODS.</b>										
January, . . .	97.58	97.37	99.25	96.87	96.47	2.42	2.63	0.75	3.13	3.53
February, . . .	98.65	97.97	98.34	97.58	99.31	1.35	2.03	1.66	2.42	0.69
March, . . .	99.71	98.49	99.51	98.90	100.00	0.29	1.60	0.49	1.10	-
April, . . .	100.00	97.15	100.00	99.32	99.83	-	2.85	-	0.68	0.17
May, . . .	99.65	96.97	99.63	99.12	99.64	0.35	3.03	0.37	0.88	0.36
June, . . .	98.19	98.00	99.45	98.67	96.55	1.81	2.00	0.55	1.33	3.45
July, . . .	97.59	96.51	98.98	98.36	88.63	2.41	3.49	1.02	6.64	11.37
August, . . .	97.63	95.70	98.67	94.14	77.77	2.37	4.30	1.33	5.86	22.23
September, . . .	95.78	97.33	98.36	99.24	69.13	4.22	2.68	1.64	0.76	30.87
October, . . .	96.95	99.77	99.28	99.92	76.18	3.05	0.23	0.72	0.08	23.82
November, . . .	96.87	100.00	99.09	100.00	75.85	3.13	-	0.91	-	24.15
December, . . .	97.28	99.45	97.63	98.30	82.05	2.72	0.55	2.37	1.70	17.95
<b>WORSTED GOODS.</b>										
January, . . .	96.46	96.66	97.45	90.68	97.02	3.54	4.34	2.55	9.32	2.98
February, . . .	96.25	98.03	98.19	90.76	97.64	3.75	1.97	1.81	9.24	2.36
March, . . .	97.23	98.96	98.07	92.29	99.37	2.77	1.04	1.93	7.71	0.63



INDUSTRIES AND MONTHS.	PERCENTAGES OF EMPLOYMENT DURING THE MONTHS SPECIFIED IN—					PERCENTAGES OF UNEMPLOYMENT DURING THE MONTHS SPECIFIED IN—				
	1889	1890	1891	1892	1893	1889	1890	1891	1892	1893
<b>WORSTED GOODS</b>										
— Con.										
April, . . .	95.83	99.39	97.15	92.21	99.70	4.17	0.61	2.85	7.79	0.30
May, . . .	94.94	95.63	99.07	92.52	100.00	5.06	4.37	0.93	7.48	-
June, . . .	95.87	92.70	99.58	94.07	98.44	4.13	7.30	0.42	5.93	1.56
July, . . .	96.54	89.98	98.92	95.33	96.07	3.46	10.07	1.08	4.67	3.93
August, . . .	99.41	89.75	100.00	97.85	76.31	0.59	10.25	-	2.15	23.69
September, . . .	97.20	91.35	99.28	97.99	71.75	2.80	8.65	0.72	2.01	28.25
October, . . .	97.60	93.86	98.14	98.68	82.18	2.40	6.14	1.86	1.32	17.82
November, . . .	98.70	94.93	96.82	99.62	81.24	1.30	5.07	3.18	0.38	18.76
December, . . .	100.00	100.00	94.43	100.00	87.43	-	-	5.57	-	12.57
<b>ALL INDUSTRIES.</b>										
January, . . .	96.58	94.90	98.43	95.55	97.39	3.42	5.10	1.57	4.45	2.61
February, . . .	97.87	96.29	98.89	97.02	98.02	2.13	3.71	1.11	2.98	1.98
March, . . .	98.39	97.29	99.23	97.93	99.09	1.61	2.71	0.72	2.07	0.91
April, . . .	98.48	97.23	99.70	98.99	100.00	1.52	2.77	0.30	1.01	-
May, . . .	98.62	97.50	100.00	98.90	99.63	1.38	2.50	-	1.10	0.37
June, . . .	98.63	97.96	99.34	98.26	97.08	1.37	2.04	0.66	1.74	2.92
July, . . .	97.65	96.87	98.11	97.15	91.68	2.35	3.13	1.89	2.85	8.32
August, . . .	98.31	97.55	98.27	97.62	82.51	1.69	2.45	1.73	2.38	17.49
September, . . .	99.47	98.95	99.17	99.05	77.67	0.53	1.05	0.83	0.95	22.33
October, . . .	100.00	100.00	99.70	99.93	84.73	-	-	0.30	0.07	15.27
November, . . .	99.70	99.24	98.98	100.00	84.86	0.30	0.76	1.02	-	15.14
December, . . .	99.04	98.58	99.24	99.76	85.22	0.96	1.42	0.76	0.24	14.78

In analyzing the preceding table, let us consider first the section relating to all industries in the aggregate. It should be understood that, in each of the years named in the table, the aggregate number of persons employed at the period of employment of the greatest number, in any particular industry, or in All Industries, is considered 100 per cent. The percentages of unemployment during the other months are obtained by finding the difference between the number of persons employed in such months, and the number employed at the period of employment of the greatest number. For instance, taking the year 1889, the first year represented in the table, the largest number of persons employed at any time during the year, in All Industries, appeared in the month of October; this number being 100 per cent. In the month of January, 96.58 per cent of the number found enrolled in the month of October were employed, the percentage of unemployment in that month being obtained by deducting 96.58 from 100, or 3.42. With this

explanation of the manner in which the percentage of unemployment is computed, we may consider the figures.

Taking the percentages month by month, for All Industries, beginning with January, 1889, it will be seen that employment, as a rule, is quite uniform, unemployment seldom rising above three per cent, while it sometimes falls below one per cent. Occasional months of depression occur, due, in most cases, to temporary stoppages for various reasons.

Referring once more to the figures for All Industries, such a period will be found to have occurred in the month of January, 1890, when the percentage of unemployment was 5.10; but, as a rule, our statement as to the general uniformity of employment is clearly supported by the figures.

The table, therefore, strikingly illustrates the force of the industrial depression of 1893, and marks the abnormal condition which, during the last months of the year, affected our industries. In August, confining ourselves to the figures for All Industries, the percentage of unemployment rose to 17.49; in September it became 22.33; and during October and November was 15.27 and 15.14, respectively. In December a slight improvement is noted, the percentage of unemployment in that month being 14.78; but, from the first of August to the end of the year, unemployment practically affected one-sixth of the maximum number on the rolls, as returned in April, and in September it was nearly one-fourth of the maximum number. These high percentages, so long continued, indicate an amount of unemployment at once abnormal and exceedingly severe in its effect. Substantially, the same general condition is to be noted in each of the leading industries included in the table.

The first industry presented is Boots and Shoes. In this industry, the percentage of unemployment in July, 1893, was 15.29, rising in the next month to 19.26, and never falling below that figure during the remainder of the year; while in November the percentage was 20.92. Prior to July, 1893, the highest percentage of unemployment reached in any single month since January, 1889, was 10.40 in the month of January, 1890, and this was unusually high, the ordinary range during the year being from less than one per cent to about eight or nine per cent, the highest figure being continued for a short time only.

The highest percentage of unemployment found in either of these industries during 1893 is shown in Carpetings. In this industry, in the month of September, 62.65 per cent of the number of persons enrolled in June were out of employment. The range of high percentages of unemployment begins in August, the percentage in that month being 26.63, and continues during the year, the percentages dropping to 17.27 and 17.11 in the months of November and December, respectively. Prior to August, 1893, a percentage of unemployment higher than four is unusual. In the month of May, 1889, a percentage of 14.12 appears, but this was abnormal and due, undoubtedly, to a peculiar condition temporarily affecting the industry.

In Cotton Goods, the percentage of unemployment in August, 1893, was 15.26, but this industry, unlike the others, shows a marked recovery during the months of October, November, and December, the percentages of unemployment in these months being 5.67, 4.51, and 4.94, respectively, figures which are unusually high for the industry, as compared with normal conditions, but which are small considering the unusual industrial depression. It is interesting to note the much greater uniformity of employment in the cotton goods industry than in Boots and Shoes. Seasonal disturbances are much less marked in the former than in the latter. During the year 1889, the percentage of unemployment in Cotton Goods did not rise above 2.81, and this figure was maintained for but a single month. In 1890, the highest percentage of unemployment was 2.80, and, as a rule, it was less than two per cent. In 1891, the highest percentage was 1.75, and for seven months in this year the percentage of unemployment was less than one per cent. In 1892, the highest percentage of unemployment was 1.91, and in this year for six months unemployment was less than one per cent.

In Paper and Paper Goods, another important industry, unemployment rarely rises so high as four per cent in any month. In the month of August, 1893, it became 11.11 per cent, and did not fall below 10 per cent during the rest of the year.

In Woollen Goods, as in Cotton Goods, substantial uniformity of employment appears. In the month of July, 1893, however, the percentage of unemployment was 11.37, rising in

August to 22.23, and in September to 30.87, and never declining below 20 per cent, during the remainder of the year, except in the month of December when 17.95 per cent appears.

In Machines and Machinery, and in Metals and Metallic Goods, while employment is, as a rule, quite uniform, the percentages of unemployment range higher than in the textile industries, it not being unusual to find from seven to eight per cent of the maximum number enrolled unemployed during certain months of the year in Machines and Machinery, and from four to five per cent in Metals and Metallic Goods. These percentages, however, are small as compared with the percentages which appear in the last half of the year 1893. In Metals and Metallic Goods, the percentage of unemployment in July, 1893, was 10.51, rising to 13.70 in August, and never falling below this point during the remainder of the year. In Machines and Machinery, the percentage of unemployment in August, 1893, was 15.51, rising to 21.27 in September, and continuing to increase during the remaining months of the year, until the percentage of 25.78 was reached in December. It is not necessary to comment on the figures contained in this table at greater length.

The maximum number enrolled in each year in the establishments from which these annual returns were received, which include the principal establishments in the industries, covering nearly 70 per cent of the industrial capital and output of the State, was as follows, by years:

YEARS.											Employés	Establishments
1889,	.	.	.	.	.	.	.	.	.	.	284,834	3,041
1890,	.	.	.	.	.	.	.	.	.	.	295,218	3,745
1891,	.	.	.	.	.	.	.	.	.	.	301,199	4,473
1892,	.	.	.	.	.	.	.	.	.	.	311,037	4,397
1893,	.	.	.	.	.	.	.	.	.	.	319,818	4,397

Although the number of establishments making annual returns is less than the total number in the different industries, respectively, it has been conclusively shown, by frequent comparisons with the complete returns obtained in the census, that the condition of the industries can be accurately determined from these annual reports, and that general statements drawn

from them may be applied to the industries as a whole, without material inaccuracy. As statements of proportions, therefore, these percentages may be relied upon, and may be considered to reflect general conditions. The actual number of persons upon which the percentages of employment and unemployment were based, in All Industries, is as follows, by months; although, for the reason that the number of establishments making returns was less than the total number engaged in the industries, these numbers are less than the actual number employed or unemployed, respectively.

MONTHS.	NUMBER OF PERSONS EMPLOYED					NUMBER UNEMPLOYED BASED UPON MAXIMUM EMPLOYMENT				
	1889	1890	1891	1892	1893	1889	1890	1891	1892	1893
January, . .	255,764	280,162	296,461	297,195	311,470	9,070	15,056	4,738	13,842	8,348
February, . .	259,183	284,266	297,854	301,779	313,494	5,651	10,952	3,345	9,258	6,324
March, . . .	260,557	287,223	299,039	304,595	316,919	4,277	7,995	2,160	6,442	2,899
April, . . .	260,809	287,033	300,290	307,881	319,818	4,025	8,185	909	3,156	-
May, . . . .	261,174	287,842	301,199	307,621	318,638	3,660	7,876	-	3,416	1,180
June, . . . .	261,193	289,203	299,214	305,611	310,485	3,641	6,015	1,985	5,426	9,833
July, . . . .	258,604	285,974	295,515	302,158	293,203	6,230	9,244	5,684	8,879	26,615
August, . . .	260,366	287,987	295,996	303,647	263,874	4,468	7,231	5,203	7,390	55,944
September, .	263,425	292,122	298,697	308,087	248,404	1,409	3,096	2,502	2,950	71,414
October, . . .	264,834	295,218	300,288	310,813	270,972	-	-	911	224	48,846
November, . .	264,034	292,987	298,116	311,037	271,409	800	2,231	3,083	-	48,409
December, . .	262,298	291,018	298,913	310,303	272,561	2,536	4,200	2,286	734	47,257

Averaging the number of persons considered as unemployed in this table, in the months during which the number of employed persons returned was less than the maximum number enrolled, and computing the percentage which such an average number forms of the maximum number, this maximum being in each year considered 100 per cent, we obtain the following average percentages of unemployment for the entire year:

1889, . . . . .	1.44
1890, . . . . .	2.30
1891, . . . . .	0.91
1892, . . . . .	1.65
1893, . . . . .	8.51

Of course, in thus computing an average percentage of unemployment, the unemployment month by month is mathematically distributed over the entire year. Such an average is of

no practical value, except for the purpose of comparing the years with one another. In such a comparison it would appear that in the year 1891 as a whole, employment was more uniform than in either of the others; the years standing next to 1891 being 1889 and 1892, in the order named, although with slight differences between them; while the percentage for the year 1890 is more than twice as large as for the year 1891, and considerably larger than the percentages for the years 1889 and 1892. The year 1893, of course, stands by itself, the percentage of unemployment being out of all proportion to the percentages shown in the other years. Upon the basis of this comparison, it may be fairly said that the year 1891 was a more prosperous year than the normal, while 1889 and 1892 may be classed as normal years, 1890 being less prosperous than the normal, and 1893 entirely abnormal.

Still bearing in mind that these numbers are, for the reason previously stated, less than the total, and selecting 1892 as a normal year, a selection entirely justified by a comparison of the series of percentages just given, it may be said with absolute truth that, under normal conditions in any year, at least as many persons will be found out of employment, month by month, as were shown to be unemployed in 1892 by this table.

The unusual conditions, beginning in the summer of 1893, are shown by the fact that at least 55,944 persons were unemployed in the manufacturing industries alone in August, rising to 71,414 in September, and continuing at 48,846, 48,409, and 47,257, during October, November, and December, respectively. This statement leaves out of consideration unemployment in all other occupations, such as trade, transportation, etc., which in Massachusetts suffer when manufacturing is depressed and are prosperous when manufacturing prospers.

The percentages of unemployment which have been presented in the table on pages 121-124, are by months, and do not show fluctuations of employment within the month. In each year there is a period of employment of the smallest number when a less number of persons are employed than may be enrolled for the month as a whole. The percentage which the number employed at the period of employment of the smallest number formed of the number employed at the period of employment of the greatest number, by years, is as follows: 1889, 23.33; 1890, 22.09; 1891, 22.48; 1892, 22.34; 1893, 35.62.

In considering the number of persons out of employment at any particular time, it should be remembered that, in a Commonwealth like ours, devoted almost entirely to manufacturing, a comparatively slight depression will result in a large number of persons unemployed. Commenting upon this in the report on the Annual Statistics of Manufactures for 1893, the following language is used :

If it be borne in mind that 4,397 establishments enter into the comparison between 1892 and 1893, we shall at once recognize the large number of persons which, in the aggregate, will appear as unemployed if only a slight reduction of the working force is made in each establishment. For instance, the discharge of one person from each of these establishments would not of itself be thought worthy of comment, nor would it be likely to be noticed as an evidence of industrial depression, yet it would mean in the aggregate 4,397 persons unemployed. If ten persons were dropped from the rolls in each establishment, it would carry the aggregate number unemployed to 43,970 persons, yet even the discharge of ten persons from establishments of the capacity of those which enter into these returns would not be thought a large reduction in the number of employes. When it is remembered that these establishments are only a small part of the whole number of establishments engaged in manufactures and mechanical industries in the United States, it at once becomes plain that a very slight industrial depression, if felt throughout the country, would quickly result in the unemployment of possibly 1,000,000 persons, the number which is frequently ascribed to 'the army of the unemployed,' and that such an army, if in existence at any particular time, would not be indicative of an industrial condition either abnormal or particularly severe, if the unemployment were uniformly distributed over the whole number of establishments. If, however, as at the periods of employment of the smallest number in 1893, the percentage of unemployment rises to 35.62, more than one-third the whole number found at work at the time of employment of the greatest number, and this condition exists over the whole country, the aggregate number unemployed must inevitably be very large, without taking into account the number thrown out in other branches of industry.

Under normal conditions, production is never carried to its greatest limit. Very few establishments are run entirely through the year, and when individual establishments are disregarded, and the condition obtaining in the different industries as a whole is considered, there is in each year a certain amount of lost time.



The following table presents the average number of days in operation, year by year, all establishments being considered, in the different industries, beginning with the year 1889 : \*

INDUSTRIES.	1889	1890	1891	1892	1893
Agricultural implements, . . . . .	274.86	298.25	285.21	292.72	290.05
Arms and ammunition, . . . . .	296.00	300.38	299.31	291.10	283.28
Artisans' tools, . . . . .	300.92	294.10	297.11	295.98	275.17
Awnings, sails, tents, etc., . . . . .	288.24	289.97	288.86	280.17	279.99
Boots and shoes, . . . . .	285.88	288.72	289.18	293.56	274.41
Bases (paper and wooden), . . . . .	287.41	294.17	291.57	294.96	274.58
Brick, tile, and sewer pipe, . . . . .	209.32	227.77	234.07	238.23	231.46
Brooms, brushes, and mops, . . . . .	293.95	301.99	301.48	303.27	291.37
Burial cases, caskets, coffins, etc., . . . . .	305.00	305.78	306.07	306.13	304.85
Buttons and dress trimmings, . . . . .	297.09	300.28	299.00	298.74	269.33
Carpetings, . . . . .	285.17	297.23	301.76	303.83	247.53
Carriages and wagons, . . . . .	295.78	298.17	296.41	298.03	289.24
Cement, kaolin, lime, and plaster, . . . . .	300.75	304.56	285.30	296.85	283.97
Chemical preparations (compounded), . . . . .	304.88	302.39	289.62	302.21	297.03
Clocks and watches, . . . . .	296.86	287.93	282.12	286.46	260.54
Clothing, . . . . .	289.17	296.95	296.12	296.97	279.53
Cooking, lighting, and heating apparatus, . . . . .	274.11	274.39	277.99	281.07	265.50
Cordage and twine, . . . . .	291.56	297.83	295.35	295.19	284.08
Corks, bungs, and taps, . . . . .	302.00	308.64	296.21	298.32	296.00
Cotton goods, . . . . .	296.25	299.05	304.16	304.85	282.09
Cotton, woollen, and other textiles, . . . . .	294.00	301.88	312.40	304.61	255.93
Crayons, pencils, crucibles, etc., . . . . .	304.00	303.73	301.85	284.81	249.89
Drugs and medicines, . . . . .	299.19	302.48	302.27	302.16	295.33
Dyestuffs, . . . . .	280.57	283.87	275.26	272.53	252.01
Earthen, plaster, and stone ware, . . . . .	283.75	295.57	272.07	288.63	277.80
Electrical apparatus and appliances, . . . . .	304.60	302.24	306.25	305.74	266.77
Electroplating, . . . . .	290.88	280.85	295.36	290.57	278.96
Emery and sand paper and cloth, etc., . . . . .	303.40	298.08	303.35	299.48	264.78
Fancy articles, etc., . . . . .	282.17	294.43	299.53	292.24	281.06
Fertilizers, . . . . .	304.00	271.26	257.66	305.09	302.90
Fine arts and taxidermy, . . . . .	286.67	306.00	273.56	303.50	305.00
Flax, hemp, jute, and linen goods, . . . . .	300.20	302.10	301.35	293.80	259.72
Food preparations, . . . . .	297.09	295.56	302.05	304.42	298.64
Furniture, . . . . .	290.70	296.34	298.97	297.67	286.37
Glass, . . . . .	279.63	278.94	287.30	294.11	242.32
Glue, isinglass, and starch, . . . . .	250.60	275.03	232.61	234.06	232.85
Hair work (animal and human), . . . . .	274.50	291.44	297.29	299.02	278.00
Hose: rubber, linen, etc., . . . . .	272.50	286.08	299.69	295.21	274.42
Hosiery and knit goods, . . . . .	277.03	297.53	300.53	299.38	281.44
Ink, mucilage, and paste, . . . . .	283.50	302.45	302.47	302.60	291.65
Ivory, bone, shell, and horn goods, etc., . . . . .	299.00	299.16	299.13	289.06	277.86
Leather, . . . . .	288.19	294.08	286.59	294.12	279.04
Liquors and beverages (not spirituous), . . . . .	305.67	295.98	304.95	303.25	302.11
Liquors: malt, distilled, and fermented, . . . . .	284.00	297.17	300.84	301.83	301.27

\* The average number of days in operation is based upon the average number of persons employed, the number of days being multiplied by the figures representing the average number of persons, and the sum divided by the aggregate number of persons, thus obtaining an average for each establishment in each of the industries considered, and for All Industries.



INDUSTRIES.	1889	1890	1891	1892	1893
Lumber, . . . . .	283.75	290.31	274.40	300.60	255.65
Machines and machinery, . . . . .	299.09	304.22	297.40	303.51	286.60
Metals and metallic goods, . . . . .	290.33	296.99	294.87	292.02	266.52
Mixed textiles, . . . . .	295.67	293.15	290.83	298.85	285.56
Models, lasts, and patterns, . . . . .	306.00	305.93	305.88	289.97	286.77
Musical instruments and materials, . . . . .	295.16	296.43	299.54	298.19	264.84
Oils and illuminating fluids, . . . . .	296.56	306.28	306.11	306.17	306.73
Paints, colors, and crude chemicals, . . . . .	277.81	295.69	297.09	295.77	281.61
Paper and paper goods, . . . . .	293.15	296.91	300.02	299.99	276.52
Perfumes, toilet articles, etc., . . . . .	308.00	304.46	305.50	303.86	289.18
Photographs and photographic materials, . . . . .	306.00	306.15	303.97	304.22	301.32
Polishes and dressing, . . . . .	275.69	301.71	302.37	294.48	286.08
Printing, publishing, and bookbinding, . . . . .	300.00	301.40	303.60	305.14	303.01
Print works, dye works, and bleacheries, . . . . .	290.05	296.93	295.01	300.13	266.82
Railroad construction and equipment, . . . . .	301.00	303.06	251.68	300.63	291.64
Rubber and elastic goods, . . . . .	295.29	282.76	283.02	281.15	234.55
Saddlery and harness, . . . . .	-	-	-	303.55	296.37
Scientific instruments and appliances, . . . . .	294.71	301.74	302.73	301.22	289.49
Shipbuilding, . . . . .	286.95	297.54	296.56	295.98	293.40
Silk and silk goods, . . . . .	302.20	298.93	296.26	300.71	261.73
Sporting and athletic goods, . . . . .	291.83	294.90	303.22	303.31	280.93
Stone, . . . . .	289.64	288.64	287.57	274.26	283.07
Straw and palm leaf goods, . . . . .	252.12	267.51	245.17	267.27	264.26
Tallow, candles, soap, and grease, . . . . .	301.85	304.91	303.78	298.43	287.41
Tobacco, snuff, and cigars, . . . . .	288.56	294.42	296.01	297.41	290.41
Toys and games (children's), . . . . .	290.00	297.07	298.12	297.46	282.94
Trunks and valises, . . . . .	295.13	306.00	305.91	306.00	279.56
Whips, lashes, and stocks, . . . . .	289.00	294.80	295.71	300.58	245.79
Wooden goods, . . . . .	291.69	292.17	292.05	295.12	281.04
Woollen goods, . . . . .	286.00	293.48	298.42	299.29	262.37
Worsted goods, . . . . .	296.20	306.11	305.13	303.61	277.96
ALL INDUSTRIES, . . . . .	289.56	296.44	296.78	297.83	277.36

The figures contained in the preceding table are derived from annual reports made to the Bureau in each year named. Besides the industries specified in the table, there are a few from which annual returns are not received. These are shown in the following table, the number of days in operation being derived from the returns of the Decennial Census of 1885:

INDUSTRIES NOT MAKING RETURN IN 1893	Days in Operation in Census Year	INDUSTRIES NOT MAKING RETURN IN 1893	Days in Operation in Census Year
Artificial teeth and dental work, . . . . .	305.62	Fireworks and matches, . . . . .	261.20
Building, . . . . .	288.51	Gas and residual products, . . . . .	353.09
Charcoal and kindlers, . . . . .	175.36	Salt, . . . . .	167.80
Concrete walks, paving, etc., . . . . .	254.26		

In considering the statistics shown in these tables, it should be borne in mind that the number of working days in each year, holidays and Sundays being excluded, is 306. The industries which most nearly approximate full time are those contained in the textile group. In Cotton Goods, for instance, the number of days in operation, for the industry, in 1889, was 296.25, and in 1890, 299.05. In 1891 and 1892, nearly full time was made, the average number of days in operation in these years, respectively, being 304.16 and 304.85. Industries of the opposite class, which are subject to seasonal depression, and which, therefore, show a minimum number of days in operation, are Building, in which the number of days in operation, as shown by the second table, was, for the census year, 288.51; and industries allied with Building, or which can only be conducted during certain months, or in favorable weather, such, for instance, as the small industry classed as Concrete Walks, Paving, etc., in which the number of days in operation, as derived from the Census, was 254.26.

For the purpose of showing the number of days in operation, so far as relates to establishments, the industry classification being disregarded, the following analysis table is introduced, the establishments included being those which made returns in the years named, comprising the principal establishments in all industries :

CLASSIFICATION OF DAYS IN OPERATION.	NUMBER OF ESTABLISHMENTS					PERCENTAGES				
	1889	1890	1891	1892	1893	1889	1890	1891	1892	1893
Under 100 days, . . . .	9	31	33	44	69	0.30	0.83	0.73	1.00	1.57
100 but under 150 days, . .	28	35	50	49	80	0.92	0.93	1.11	1.11	1.82
150 but under 200 days, . .	51	93	110	134	204	1.68	2.46	2.46	3.05	4.64
200 but under 250 days, . .	167	221	266	228	594	5.49	5.90	5.95	5.19	13.51
250 but under 300 days, . .	801	883	979	904	1,449	26.34	23.58	21.89	20.56	32.95
300 days and over, . . . .	1,965	2,483	3,035	3,038	2,001	65.27	66.30	67.86	69.09	45.51
TOTALS, . . . . .	3,041	3,745	4,473	4,397	4,397	100.00	100.00	100.00	100.00	100.00

The statistics of the number of days in operation relate only to working time, and show nothing as regards the working force, that is, do not indicate partial or extensive reductions in the number of persons employed, unless there was an entire suspension of business. If the establishments were not in operation, of course, all the employ es would be unemployed so far as

that particular establishment is concerned. As a suspension of six days during the year would not be considered material, bearing in mind the necessity for annual repairs, stock taking, vacations, etc., all establishments which were in operation 300 days and over may be considered to have been running full time. Referring to the percentages in the table, it will be seen that, during the year 1889, 65.27 per cent of the establishments fell within this class. In 1890, the percentage was 66.30; in 1891, 67.86; and in 1892, 69.09. As a general statement, therefore, it may be said that slightly more than two-thirds of the establishments, when all industries are considered in the aggregate, run on full time. This statement may be contrasted with the per cent shown in 1893, when only 45.51 per cent of the establishments were of this class. That is, to put the statement in another way, in the year 1893 less than one-half of the establishments ran on full time. At the other extremity of the scale, we note that only fractional percentages of the whole number of establishments were in operation for a period less than 100 days in the years 1889, 1890, and 1891, but that in 1892 one per cent of the establishments were of this class, rising in 1893 to 1.57 per cent. In the next class, including establishments which were in operation 100 but under 150 days, only fractional percentages are found in 1889 and 1890, 1.11 per cent in 1891 and 1892, rising to 1.82 per cent in 1893. Establishments which were in operation 150 but under 200 days comprised 1.68 per cent of the total in 1889; 2.46 per cent in 1890 and 1891; 3.05 per cent in 1892; while in 1893 the percentage rose to 4.64. The next class in the table includes establishments which were in operation 200 but under 250 days. Slightly more than five per cent of the total number are found in this class in each year prior to 1893, but in 1893 it includes but 13.51 per cent. From one-fifth to one-fourth of the total number of establishments were in operation 250 but under 300 days in each year prior to 1893, the percentage varying from 20.56 to 26.34, but in 1893, 32.95 per cent of the establishments were of this class, or nearly one-third the total number. The peculiar condition existing in 1893 is again sharply indicated by these percentages, as well as the fact that, in general, from eight to 10 per cent of the establishments will be in operation for a period less than 250 days. In 1893, 21.54 per cent were of this class.

**STATISTICS OF WORK-RELIEF IN BOSTON.**

Statistics have been presented in this report which show quite clearly the extent of unemployment in the industries of Massachusetts under normal conditions, and also the displacement due to the industrial depression which began early in the summer of 1893 and continued through the year. There is, however, another side to the subject. This relates particularly to the social and industrial status of those who are most likely to fall into distress.

During the winter of 1893-94 much money was subscribed for the purpose of relieving this distress. Many cities and towns endeavored to meet the entirely exceptional conditions which existed, by efforts to provide temporary employment through committees of citizens. In the city of Boston such a committee disbursed a subscription fund and money received from other sources amounting to \$136,568.70, and in the aggregate nearly 10,000 persons were provided with work-relief.

What is the industrial efficiency of those who, under such circumstances, must be aided? What is their social status? Has recent immigration increased their numbers? To what extent can a fund thus administered afford relief? The results of an experiment of this magnitude should throw some light upon these important questions.

The committee in Boston as elsewhere found itself facing unusual conditions, requiring immediate action, without the advantage of previous experience in similar junctures. Leaving entirely out of account the question as to whether the scheme which the committee was set to carry out was the wisest way of dealing with the problem, and considering only the circumstances under which it was obliged to act, the various theories regarding such work which prevail in the community, the large numbers of persons who applied for relief, and the comparatively small amount of money available, its work, although it has not escaped criticism, was well done. Its operations were confined to providing out-door work for men, the headquarters for this work being at the old Court House, and in providing in-door work for women exclusively, at a principal

work-room upon Bedford street, and at smaller rooms elsewhere managed by a sub-committee composed of women.

It was manifestly impossible to aid all who applied, or to furnish continuous work to those who were selected. All applicants were therefore investigated in order to enable the committee to exercise wise discrimination as to the relative need of relief among them and to guard against imposition by the unworthy. The information thus collected, meagre as it is in some respects, is of great value. By the courtesy of the committee, we are enabled to present this information in this report.

The statistics first presented relate to the relief furnished men from the headquarters established in the old Court House. The first table shows the number of applicants, classified as voters and non-voters, with the number of each class supplied or not supplied with work, and the total amount of work-relief furnished.

WARDS AND PRECINCTS.	APPLICANTS			WORK-RELIEF						Value of Work-Relief
	Voters	Non-voters	Totals	NUMBER SUPPLIED			NUMBER NOT SUPPLIED			
				Voters	Non-voters	Totals	Voters	Non-voters	Totals	
Ward 1.	29	93	122	26	73	99	3	20	23	\$870.00
Precinct 1, . .	7	23	30	6	19	25	1	4	5	196.00
Precinct 2, . .	-	2	2	-	1	1	-	1	1	3.00
Precinct 3, . .	1	5	6	1	3	4	-	2	2	45.00
Precinct 4, . .	-	7	7	-	6	6	-	1	1	58.50
Precinct 5, . .	-	6	6	-	4	4	-	2	2	57.00
Precinct 6, . .	2	4	6	2	3	5	-	1	1	36.00
Precinct 7, . .	8	13	21	8	9	17	-	4	4	148.50
Precinct 8, . .	8	23	31	6	20	26	2	3	5	240.00
Precinct 9, . .	3	10	13	3	8	11	-	2	2	64.00
Ward 2.	10	135	145	8	102	110	2	33	35	\$1,023.00
Precinct 1, . .	4	19	23	2	12	14	2	7	9	92.50
Precinct 2, . .	-	14	14	-	9	9	-	6	6	69.00
Precinct 3, . .	1	19	20	1	12	13	-	7	7	189.50
Precinct 4, . .	2	32	34	2	25	27	-	7	7	243.00
Precinct 5, . .	-	22	22	-	18	18	-	4	4	178.50
Precinct 6, . .	3	19	22	3	17	20	-	2	2	169.50
Precinct 7, . .	-	10	10	-	9	9	-	1	1	81.00
Ward 3.	58	122	180	51	107	158	7	15	22	\$1,546.75
Precinct 1, . .	1	4	5	1	4	5	-	-	-	31.50
Precinct 2, . .	5	17	22	5	15	20	-	2	2	132.00
Precinct 3, . .	6	14	20	5	12	17	1	2	3	219.75

WARDS AND PRECINCTS.	APPLICANTS			WORK-RELIEF						Value of Work-Relief
	Voters	Non-voters	Totals	NUMBER SUPPLIED			NUMBER NOT SUPPLIED			
				Voters	Non-voters	Totals	Voters	Non-voters	Totals	
Ward 3 — Con.										
Precinct 4, . .	14	29	43	11	26	37	3	8	6	\$436.50
Precinct 5, . .	12	40	52	11	34	45	1	6	7	394.50
Precinct 6, . .	20	18	38	18	16	34	2	2	4	332.50
Ward 4.	47	84	131	39	63	102	8	21	29	\$902.50
Precinct 1, . .	9	15	24	8	14	22	1	1	2	151.50
Precinct 2, . .	1	10	11	1	7	8	—	3	3	68.25
Precinct 3, . .	5	8	13	5	5	10	—	3	3	105.00
Precinct 4, . .	12	7	19	9	6	15	3	1	4	147.75
Precinct 5, . .	19	34	53	16	25	41	3	9	12	371.50
Precinct 6, . .	1	10	11	—	6	6	1	4	5	58.50
Ward 5.	41	133	174	34	92	126	7	41	48	\$1,312.00
Precinct 1, . .	3	11	14	2	8	10	1	3	4	85.50
Precinct 2, . .	4	11	15	2	6	8	2	5	7	91.50
Precinct 3, . .	21	45	66	18	35	53	3	10	13	673.00
Precinct 4, . .	5	19	24	5	13	18	—	6	6	139.50
Precinct 5, . .	4	28	32	3	19	22	1	9	10	196.50
Precinct 6, . .	4	19	23	4	11	15	—	8	8	126.00
Ward 6.	61	1,001	1,062	50	681	731	11	320	331	\$6,065.00
Precinct 1, . .	25	175	200	23	129	152	2	46	48	1,387.50
Precinct 2, . .	5	198	203	3	136	139	2	62	64	1,142.75
Precinct 3, . .	16	101	117	13	80	93	3	21	24	770.50
Precinct 4, . .	11	302	313	9	190	199	2	112	114	1,562.75
Precinct 5, . .	4	225	229	2	146	148	2	79	81	1,221.50
Ward 7.	40	852	892	30	602	632	10	250	260	\$5,555.25
Precinct 1, . .	15	169	184	10	102	112	5	67	72	982.50
Precinct 2, . .	10	156	166	7	115	122	3	41	44	1,191.50
Precinct 3, . .	5	254	259	4	169	173	1	85	86	1,366.00
Precinct 4, . .	7	117	124	6	96	102	1	21	22	869.25
Precinct 5, . .	3	156	159	3	120	123	—	36	36	1,146.00
Ward 8.	39	556	595	31	430	461	8	126	134	\$4,435.75
Precinct 1, . .	4	28	32	3	20	23	1	8	9	205.50
Precinct 2, . .	2	12	14	—	8	8	2	4	6	73.50
Precinct 3, . .	9	79	88	8	65	73	1	14	15	765.25
Precinct 4, . .	7	197	204	6	157	163	1	40	41	1,556.00
Precinct 5, . .	7	120	127	5	90	95	2	30	32	958.00
Precinct 6, . .	10	120	130	9	90	99	1	30	31	877.50
Ward 9.	22	105	127	21	81	102	1	24	25	\$1,029.00
Precinct 1, . .	1	8	9	1	2	3	—	6	6	21.00
Precinct 2, . .	1	16	17	1	15	16	—	1	1	160.00
Precinct 3, . .	5	20	25	5	16	21	—	4	4	219.75
Precinct 4, . .	5	15	20	5	13	18	—	2	2	161.50
Precinct 5, . .	10	46	56	9	35	44	1	11	12	463.75

WARDS AND PRECINCTS.	APPLICANTS			WORK-RELIEF						Value of Work-Relief
	Voters	Non-voters	Totals	NUMBER SUPPLIED			NUMBER NOT SUPPLIED			
				Voters	Non-voters	Totals	Voters	Non-voters	Totals	
Ward 10.	8	49	52	2	33	35	1	16	17	\$418.50
Precinct 1, . .	-	2	2	-	1	1	-	1	1	3.00
Precinct 2, . .	-	1	1	-	1	1	-	-	-	3.00
Precinct 3, . .	1	7	8	1	5	6	-	2	2	63.75
Precinct 4, . .	2	39	41	1	26	27	1	13	14	343.75
Ward 11.	7	67	74	5	50	55	2	17	19	\$525.00
Precinct 5, . .	4	32	36	3	23	26	1	9	10	214.50
Precinct 6, . .	3	33	36	2	25	27	1	8	9	300.00
Precinct 9, . .	-	1	1	-	1	1	-	-	-	4.50
Precinct 10, . .	-	1	1	-	1	1	-	-	-	6.00
Ward 12.	39	252	291	33	193	226	6	50	56	\$2,529.25
Precinct 1, . .	6	38	44	5	29	34	1	9	10	390.75
Precinct 2, . .	12	52	64	9	37	46	3	15	18	654.00
Precinct 3, . .	10	70	80	9	57	66	1	13	14	675.25
Precinct 4, . .	10	70	80	9	51	60	1	19	20	613.50
Precinct 5, . .	1	22	23	1	19	20	-	3	3	195.75
Ward 13.	93	678	771	73	525	598	20	153	173	\$8,681.75
Precinct 1, . .	19	134	153	15	103	118	4	31	35	2,050.75
Precinct 2, . .	8	184	192	8	138	146	-	46	46	2,052.75
Precinct 3, . .	5	70	75	4	53	57	1	17	18	777.50
Precinct 4, . .	9	55	64	8	42	50	1	13	14	647.75
Precinct 5, . .	15	64	79	10	49	59	5	15	20	829.50
Precinct 6, . .	11	47	58	8	37	45	3	10	13	541.75
Precinct 7, . .	12	43	55	9	35	44	3	8	11	638.50
Precinct 8, . .	5	25	30	3	22	25	2	3	5	333.00
Precinct 9, . .	9	56	65	8	46	54	1	10	11	810.25
Ward 14.	67	248	315	58	208	266	9	40	49	\$8,533.75
Precinct 1, . .	7	32	39	6	26	32	1	6	7	394.50
Precinct 2, . .	8	62	70	7	54	61	1	8	9	801.50
Precinct 3, . .	18	53	71	15	47	62	3	6	9	769.50
Precinct 4, . .	9	16	25	9	14	23	-	2	2	211.50
Precinct 5, . .	5	12	17	5	7	12	-	5	5	225.00
Precinct 6, . .	8	16	24	6	11	17	2	5	7	262.50
Precinct 7, . .	2	9	11	2	9	11	-	-	-	186.00
Precinct 8, . .	2	4	6	2	3	5	-	1	1	139.50
Precinct 9, . .	5	17	22	4	14	18	1	3	4	186.00
Precinct 10, . .	-	6	6	-	6	6	-	-	-	137.25
Precinct 11, . .	1	9	10	1	7	8	-	2	2	88.50
Precinct 12, . .	2	12	14	1	10	11	1	2	3	132.00
Ward 15.	64	215	279	57	174	231	7	41	48	\$3,287.75
Precinct 1, . .	12	61	73	11	48	59	1	13	14	865.00
Precinct 2, . .	9	31	40	9	22	31	-	9	9	399.50
Precinct 3, . .	5	22	27	5	17	22	-	5	5	289.50
Precinct 4, . .	3	8	11	3	7	10	-	1	1	130.50

WARDS AND PRECINCTS.	APPLICANTS			WORK-RELIEF						Value of Work-Relief
	Voters	Non-voters	Totals	NUMBER SUPPLIED			NUMBER NOT SUPPLIED			
				Voters	Non-voters	Totals	Voters	Non-voters	Totals	
Ward 15 — Con.										
Precinct 5, . .	2	9	11	2	8	10	-	1	1	\$84.75
Precinct 6, . .	16	23	39	14	20	34	2	3	5	329.50
Precinct 7, . .	11	43	54	10	36	46	1	7	8	922.00
Precinct 8, . .	6	18	24	3	16	19	3	2	5	267.00
Ward 16.	50	382	432	41	304	345	9	78	87	\$3,836.75
Precinct 1, . .	6	43	49	4	35	39	2	8	10	472.50
Precinct 2, . .	6	56	62	5	45	50	1	11	12	624.00
Precinct 3, . .	3	18	21	3	11	14	-	7	7	127.00
Precinct 4, . .	6	21	27	5	13	18	1	8	9	236.75
Precinct 5, . .	9	113	122	8	91	99	1	22	23	1,075.75
Precinct 6, . .	20	131	151	16	109	125	4	22	26	1,300.75
Ward 17.	52	139	191	41	109	150	11	30	41	\$1,541.75
Precinct 1, . .	2	2	4	1	1	2	1	1	2	13.50
Precinct 3, . .	3	4	7	2	2	4	1	2	3	43.50
Precinct 4, . .	1	4	5	-	4	4	1	-	1	36.00
Precinct 5, . .	9	27	36	6	23	29	3	4	7	296.00
Precinct 6, . .	9	47	56	8	39	47	1	8	9	472.00
Precinct 7, . .	7	25	32	5	15	20	2	10	12	164.50
Precinct 8, . .	21	30	51	19	25	44	2	5	7	517.25
Ward 18.	22	56	78	17	45	62	5	11	16	\$794.75
Precinct 1, . .	-	2	2	-	1	1	-	1	1	4.50
Precinct 2, . .	-	3	3	-	3	3	-	-	-	44.00
Precinct 3, . .	-	1	1	-	1	1	-	-	-	3.00
Precinct 4, . .	1	2	3	-	1	1	1	1	2	19.50
Precinct 5, . .	1	6	7	1	3	4	-	3	3	46.50
Precinct 6, . .	19	28	47	16	24	40	3	4	7	507.75
Precinct 7, . .	1	14	15	-	12	12	1	2	3	169.50
Ward 19.	74	355	429	65	297	362	9	58	67	\$4,497.75
Precinct 1, . .	13	62	75	13	50	63	-	12	12	809.00
Precinct 2, . .	19	52	71	17	45	62	2	7	9	814.25
Precinct 3, . .	5	37	42	5	32	37	-	5	5	373.75
Precinct 4, . .	5	19	24	5	13	18	-	6	6	183.75
Precinct 5, . .	3	21	24	3	20	23	-	1	1	227.50
Precinct 6, . .	3	14	17	3	11	14	-	3	3	211.50
Precinct 7, . .	7	44	51	5	36	41	2	8	10	523.25
Precinct 8, . .	10	47	57	8	36	44	2	11	13	599.00
Precinct 9, . .	9	59	68	6	54	60	3	5	8	755.75
Ward 20.	52	220	272	43	183	226	9	37	46	\$2,667.75
Precinct 1, . .	13	61	74	10	52	62	3	9	12	785.25
Precinct 2, . .	8	37	45	8	28	36	-	9	9	410.75
Precinct 3, . .	4	11	15	3	8	11	1	3	4	120.00
Precinct 4, . .	-	1	1	-	1	1	-	-	-	21.00
Precinct 5, . .	8	35	43	6	27	33	2	8	10	366.75
Precinct 6, . .	7	36	43	6	32	38	1	4	5	413.00



WARDS AND PRECINCTS.	APPLICANTS			WORK-RELIEF						Value of Work-Relief
	Voters	Non-voters	Totals	NUMBER SUPPLIED			NUMBER NOT SUPPLIED			
				Voters	Non-voters	Totals	Voters	Non-voters	Totals	
Ward 10.	8	49	52	2	33	35	1	16	17	\$418.50
Precinct 1, . .	-	2	2	-	1	1	-	1	1	3.00
Precinct 2, . .	-	1	1	-	1	1	-	-	-	3.00
Precinct 3, . .	1	7	8	1	5	6	-	2	2	63.75
Precinct 4, . .	2	39	41	1	26	27	1	13	14	348.75
Ward 11.	7	67	74	5	50	55	2	17	19	\$525.00
Precinct 5, . .	4	32	36	3	23	26	1	9	10	214.50
Precinct 6, . .	3	33	36	2	25	27	1	8	9	300.00
Precinct 9, . .	-	1	1	-	1	1	-	-	-	4.50
Precinct 10, . .	-	1	1	-	1	1	-	-	-	6.00
Ward 12.	39	252	291	33	193	226	6	59	65	\$2,529.25
Precinct 1, . .	6	38	44	5	29	34	1	9	10	390.75
Precinct 2, . .	12	52	64	9	37	46	3	15	18	654.00
Precinct 3, . .	10	70	80	9	57	66	1	18	19	675.25
Precinct 4, . .	10	70	80	9	51	60	1	19	20	613.50
Precinct 5, . .	1	22	23	1	19	20	-	3	3	195.75
Ward 13.	93	678	771	73	525	598	20	153	173	\$8,681.75
Precinct 1, . .	19	134	153	15	103	118	4	31	35	2,050.75
Precinct 2, . .	8	184	192	8	138	146	-	46	46	2,052.75
Precinct 3, . .	5	70	75	4	53	57	1	17	18	777.50
Precinct 4, . .	9	55	64	8	42	50	1	13	14	647.75
Precinct 5, . .	15	64	79	10	49	59	5	15	20	829.50
Precinct 6, . .	11	47	58	8	37	45	3	10	13	541.75
Precinct 7, . .	12	43	55	9	35	44	3	8	11	638.50
Precinct 8, . .	5	25	30	3	22	25	2	3	5	333.00
Precinct 9, . .	9	56	65	8	46	54	1	10	11	810.25
Ward 14.	67	248	315	58	208	266	9	40	49	\$3,533.75
Precinct 1, . .	7	32	39	6	26	32	1	6	7	394.50
Precinct 2, . .	8	62	70	7	54	61	1	8	9	801.50
Precinct 3, . .	18	53	71	15	47	62	3	6	9	769.50
Precinct 4, . .	9	16	25	9	14	23	-	2	2	211.50
Precinct 5, . .	5	12	17	5	7	12	-	5	5	225.00
Precinct 6, . .	8	16	24	6	11	17	2	5	7	262.50
Precinct 7, . .	2	9	11	2	9	11	-	-	-	186.00
Precinct 8, . .	2	4	6	2	3	5	-	1	1	139.50
Precinct 9, . .	5	17	22	4	14	18	1	3	4	186.00
Precinct 10, . .	-	6	6	-	6	6	-	-	-	137.25
Precinct 11, . .	1	9	10	1	7	8	-	2	2	83.50
Precinct 12, . .	2	12	14	1	10	11	1	2	3	132.00
Ward 15.	64	215	279	57	174	231	7	41	48	\$3,287.75
Precinct 1, . .	12	61	73	11	48	59	1	13	14	865.00
Precinct 2, . .	9	31	40	9	22	31	-	9	9	399.50
Precinct 3, . .	5	22	27	5	17	22	-	5	5	289.50
Precinct 4, . .	3	8	11	3	7	10	-	1	1	130.50

WARDS AND PRECINCTS.	APPLICANTS			WORK-RELIEF						Value of Work-Relief
	Voters	Non-voters	Totals	NUMBER SUPPLIED			NUMBER NOT SUPPLIED			
				Voters	Non-voters	Totals	Voters	Non-voters	Totals	
Ward 15 — Con.										
Precinct 5, . .	2	9	11	2	8	10	-	1	1	\$84.75
Precinct 6, . .	16	23	39	14	20	34	2	3	5	329.50
Precinct 7, . .	11	43	54	10	36	46	1	7	8	922.00
Precinct 8, . .	6	18	24	3	16	19	3	2	5	267.00
Ward 16.	50	382	432	41	304	345	9	78	87	\$3,836.75
Precinct 1, . .	6	43	49	4	35	39	2	8	10	472.50
Precinct 2, . .	6	56	62	5	45	50	1	11	12	624.00
Precinct 3, . .	3	18	21	3	11	14	-	7	7	127.00
Precinct 4, . .	6	21	27	5	13	18	1	8	9	236.75
Precinct 5, . .	9	113	122	8	91	99	1	22	23	1,075.75
Precinct 6, . .	20	131	151	16	109	125	4	22	26	1,300.75
Ward 17.	52	139	191	41	109	150	11	30	41	\$1,541.75
Precinct 1, . .	2	2	4	1	1	2	1	1	2	13.50
Precinct 3, . .	3	4	7	2	2	4	1	2	3	43.50
Precinct 4, . .	1	4	5	-	4	4	1	-	1	36.00
Precinct 5, . .	9	27	36	6	23	29	3	4	7	296.00
Precinct 6, . .	9	47	56	8	39	47	1	8	9	472.00
Precinct 7, . .	7	25	32	5	15	20	2	10	12	164.50
Precinct 8, . .	21	30	51	19	25	44	2	5	7	517.25
Ward 18.	22	56	78	17	45	62	5	11	16	\$794.75
Precinct 1, . .	-	2	2	-	1	1	-	1	1	4.50
Precinct 2, . .	-	3	3	-	3	3	-	-	-	44.00
Precinct 3, . .	-	1	1	-	1	1	-	-	-	3.00
Precinct 4, . .	1	2	3	-	1	1	1	1	2	19.50
Precinct 5, . .	1	6	7	1	3	4	-	3	3	46.50
Precinct 6, . .	19	23	42	16	24	40	3	4	7	507.75
Precinct 7, . .	1	14	15	-	12	12	1	2	3	169.50
Ward 19.	74	355	429	65	297	362	9	58	67	\$4,497.75
Precinct 1, . .	13	62	75	13	50	63	-	12	12	809.00
Precinct 2, . .	19	52	71	17	45	62	2	7	9	814.25
Precinct 3, . .	5	37	42	5	32	37	-	5	5	373.75
Precinct 4, . .	5	19	24	5	13	18	-	6	6	183.75
Precinct 5, . .	3	21	24	3	20	23	-	1	1	227.50
Precinct 6, . .	3	14	17	3	11	14	-	3	3	211.50
Precinct 7, . .	7	44	51	5	36	41	2	8	10	523.25
Precinct 8, . .	10	47	57	8	36	44	2	11	13	599.00
Precinct 9, . .	9	59	68	6	54	60	3	5	8	755.75
Ward 20.	52	220	272	43	183	226	9	37	46	\$2,667.75
Precinct 1, . .	13	61	74	10	52	62	3	9	12	785.25
Precinct 2, . .	8	37	45	8	23	31	-	9	9	410.75
Precinct 3, . .	4	11	15	3	8	11	1	3	4	120.00
Precinct 4, . .	-	1	1	-	1	1	-	-	-	21.00
Precinct 5, . .	8	35	43	6	27	33	2	8	10	366.75
Precinct 6, . .	7	36	43	6	32	38	1	4	5	413.00

## RECAPITULATION — Concluded.

THE CITY, AND WARDS.	APPLICANTS			WORK-RELIEF						Value of Work-Relief
	Voters	Non-voters	Totals	NUMBER SUPPLIED			NUMBER NOT SUPPLIED			
				Voters	Non-voters	Totals	Voters	Non-voters	Totals	
THE CITY OF BOS- TON — Con.										
Ward 14, . . .	67	248	315	58	208	266	9	40	49	\$3,533.75
Ward 15, . . .	64	215	279	57	174	231	7	41	48	3,237.75
Ward 16, . . .	50	302	432	41	304	345	9	78	87	3,836.75
Ward 17, . . .	52	139	191	41	100	140	11	30	41	1,541.75
Ward 18, . . .	22	56	78	17	45	62	5	11	16	794.75
Ward 19, . . .	74	355	429	65	297	362	9	58	67	4,497.75
Ward 20, . . .	52	220	272	43	183	226	9	37	46	2,067.75
Ward 21, . . .	16	83	99	13	67	80	3	16	19	1,015.25
Ward 22, . . .	62	270	332	53	238	291	9	32	41	3,936.75
Ward 23, . . .	46	121	167	33	98	131	13	23	36	1,503.25
Ward 24, . . .	21	123	144	17	90	107	4	33	37	1,549.25
Ward 25, . . .	14	84	98	10	62	72	4	22	26	852.25
Ward not specified,	-	8	8	-	3	3	-	5	5	22.50

It will be understood by the reader that the term "work-relief" in the foregoing table, and in those which follow, indicates the amount of wages paid to the applicants for work performed. It should also be understood that the discrimination as to whether the applicant was a voter or not was not made prior to determining whether he should be given work. The political condition of the applicants was not brought out until operations had been suspended, and the statistics were placed in the hands of the Bureau for tabulation. It was then thought that it would be of value to discover just how many of the applicants for relief were actual citizens, using that term in its political sense, as indicating persons who possessed the right to vote. In order to determine this, the voting lists were carefully scanned, and the number of applicants whose names appeared upon such lists in each ward and precinct was tabulated.

Whether the applicants were supplied or not supplied with work, depended upon an investigation of the need as to relief to their families, and the amount of work furnished also depended upon the need of the family of the applicant as disclosed in this investigation. This was the general principle which actuated the committee in providing the applicants with work although it was necessarily subjected to some modification which

was unavoidable under the circumstances in which the committee was placed.

With these explanations, the figures presented in the table may be considered. From the recapitulation it is seen that the total number of applicants at the Court House was 7,460, and of this number 6,431 have been found to be non-voters, while 1,029 were voters in the city of Boston. The total number supplied with work was 5,761; of this number, 4,910 were non-voters and 851 voters. On the other hand, 1,699 applicants were not supplied with work, 1,521 being non-voters and 178 voters.

The total amount of wages paid to men was \$63,953.25. The largest number of applicants was found in ward 6, this number being 1,062, all but 61 being non-voters. Of these, 731 were supplied with work, of whom 681 were non-voters. The amount of work-relief furnished from this ward to applicants was \$6,085. A larger amount was paid to applicants from ward 13, namely, \$8,681.75, but the number of applicants, although larger than from any other ward except wards 6 and 7 was but 771, of whom 678 were non-voters. The number supplied with work was 598.

In ward 7, there were 892, all except 40 being non-voters. Of these, 632 were supplied with work, the amount of wages distributed being \$5,555.25. Other wards, in which a comparatively large number of applicants appeared, (aggregating considerably less than in the wards which have been named) are ward 8, 595 applicants, of whom 461 were supplied with work to the amount of \$4,435.75; ward 14, the number of applicants being 315, of whom 266 were supplied with work to the amount of \$3,533.75; ward 16, the number of applicants being 432, of whom 345 were supplied with work to the amount of \$3,836.75; ward 19, the number of applicants being 429, of whom 362 were supplied with work to the amount of \$4,497.75; and ward 22, in which 332 applicants appear, of whom 291 were supplied with work to the amount of \$3,936.75.

In an investigation which the Bureau has recently made into the condition of the tenement house population in the city, the results of which were published in the reports of the Bureau for the years 1891 and 1892, it was shown that the worst conditions as to overcrowding and poor or bad sanitary surround-

ings existed in a district comprising wards 6, 7, 11 (precinct 5), 12 (precincts 1 and 2), 13 (precincts 1, 2, 3, and 5), 16 (precincts 1, 2, 3, and 6), and 19 (precincts 2, 3, 4, and 6). These wards and precincts also rank among those which are most densely populated, and in which the tenement houses are generally in the worst condition. As they were relatively overcrowded as compared with the other wards and also contained a large proportion of the places which were found in poor or bad sanitary condition, they were grouped under the general title of the "concentrated district." \*

For the purpose of determining whether or not this district contained a large proportion of those who applied for work-relief, the following table is presented :

THE CONCENTRATED DISTRICT.	APPLICANTS			WORK-RELIEF						Value of Work-Relief
	Voters	Non-voters	Totals	NUMBER SUPPLIED			NUMBER NOT SUPPLIED			
				Voters	Non-voters	Totals	Voters	Non-voters	Totals	
Ward 6, . . . .	61	1,001	1,062	50	681	731	11	320	331	\$6,085.00
Ward 7, . . . .	40	852	892	30	602	632	10	250	260	5,555.25
Ward 11 (Precinct 5),	4	32	36	3	23	26	1	9	10	214.50
Ward 12 (Precincts 1 and 2), . .	18	90	108	14	66	80	4	24	28	1,044.75
Ward 13 (Precincts 1, 2, 3, and 5), .	47	452	499	37	343	380	10	109	119	5,710.50
Ward 16 (Precincts 1, 2, 3, and 6), .	35	248	283	28	200	228	7	48	55	2,524.25
Ward 19 (Precincts 2, 3, 4, and 6), .	32	122	154	30	101	131	2	21	23	1,583.25
TOTALS, . . .	237	2,797	3,034	192	2,016	2,208	45	781	826	\$22,717.50

In this presentation, the information contained in the preceding table is brought forward for the wards and precincts comprising the concentrated district. The final line of the presentation shows that the total number of applicants within this district was 3,034, only 237 of whom were voters. Of these applicants, 2,208 were furnished with work, and the

\* The choice of the word "concentrated" in describing this territory, rather than the word "congested," which is perhaps more appropriate, was made after consideration in order not to confound this tenement house district, in which the evils described in the report are concentrated, with the overcrowded business section which is constantly alluded to as the "congested district" in discussing the problem of rapid transit.

amount of relief disbursed in the form of wages was \$22,-717.50. Comparing these figures with the figures for the city at large, it appears that of all the applicants for work at the Court House, 40.67 per cent came from what we have termed the “concentrated district;” of all who were furnished with work, 38.33 per cent came from this district; and of the total amount disbursed as wages for work done in the form of relief 35.52 per cent was paid to residents of this district.

The next table presents the number of applicants by wards, classified as voters and non-voters, and also classified as to the length of residence in the city.

WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION			WARDS AND LENGTH OF TIME IN BOSTON	POLITICAL CONDITION		
	Voters	Non-voters	Totals		Voters	Non-voters	Totals
Ward 1.	29	93	122	Ward 3.	58	122	180
2 months, . . .	-	1	1	1 but under 2 years, .	-	1	1
4 months, . . .	-	1	1	2 but under 3 years, .	-	4	4
5 months, . . .	-	2	2	3 but under 4 years, .	1	7	8
6 months, . . .	-	1	1	4 but under 5 years, .	1	5	6
7 months, . . .	-	1	1	5 but under 10 years, .	8	10	18
9 months, . . .	-	2	2	10 but under 15 years, .	8	16	24
10 months, . . .	-	2	2	15 but under 30 years, .	18	36	54
1 but under 2 years, .	-	6	6	30 years and over, .	21	32	53
2 but under 3 years, .	-	8	8	Not given, . . .	6	11	17
3 but under 4 years, .	-	3	3	Ward 4.	47	84	131
4 but under 5 years, .	-	4	4	4 months, . . .	-	1	1
5 but under 10 years, .	-	19	19	9 months, . . .	-	1	1
10 but under 15 years, .	4	7	11	1 but under 2 years, .	-	5	5
15 but under 30 years, .	10	17	27	2 but under 3 years, .	1	4	5
30 years and over, .	13	15	28	3 but under 4 years, .	1	4	5
Not given, . . .	2	4	6	4 but under 5 years, .	1	-	1
Ward 2.	10	135	145	5 but under 10 years, .	4	10	14
7 months, . . .	-	2	2	10 but under 15 years, .	7	12	19
8 months, . . .	-	1	1	15 but under 30 years, .	17	25	42
9 months, . . .	-	3	3	30 years and over, .	12	18	30
11 months, . . .	-	1	1	Not given, . . .	4	4	8
1 but under 2 years, .	-	4	4	Ward 5.	41	133	174
2 but under 3 years, .	-	7	7	5 months, . . .	-	1	1
3 but under 4 years, .	-	10	10	6 months, . . .	-	1	1
4 but under 5 years, .	-	5	5	7 months, . . .	-	1	1
5 but under 10 years, .	-	22	22	7½ months, . . .	-	1	1
10 but under 15 years, .	1	16	17	10 months, . . .	-	1	1
15 but under 30 years, .	6	38	44	1 but under 2 years, .	-	6	6
30 years and over, .	8	24	27	2 but under 3 years, .	-	4	4
Not given, . . .	-	2	2				

WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION			WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION		
	Voters	Non- voters	Totals		Voters	Non- voters	Totals
<i>Ward 5 — Con.</i>				<i>Ward 8.</i>	89	556	595
3 but under 4 years, .	-	8	8	1 month, . . .	-	1	1
4 but under 5 years, .	2	5	7	3 months, . . .	-	1	1
5 but under 10 years, .	3	22	25	4 months, . . .	-	7	7
10 but under 15 years, .	2	23	25	5 months, . . .	-	3	3
15 but under 30 years, .	17	31	48	6 months, . . .	-	18	18
30 years and over, .	15	19	34	7 months, . . .	-	9	9
Not given, . . .	2	10	12	8 months, . . .	-	20	20
<i>Ward 6.</i>	61	1,001	1,062	8½ months, . . .	-	1	1
2 months, . . .	-	1	1	9 months, . . .	-	13	13
3 months, . . .	-	1	1	10 months, . . .	-	8	8
4 months, . . .	-	3	3	11 months, . . .	-	1	1
5 months, . . .	-	8	8	1 but under 2 years, .	-	49	49
6 months, . . .	-	17	17	2 but under 3 years, .	-	81	81
7 months, . . .	-	12	12	3 but under 4 years, .	1	86	87
8 months, . . .	-	13	13	4 but under 5 years, .	1	48	49
9 months, . . .	-	8	8	5 but under 10 years, .	4	88	92
10 months, . . .	-	11	11	10 but under 15 years, .	4	34	38
11 months, . . .	-	7	7	15 but under 30 years, .	10	48	58
1 but under 2 years, .	-	78	78	30 years and over, .	15	33	48
2 but under 3 years, .	-	155	155	Not given, . . .	4	7	11
3 but under 4 years, .	1	142	143	<i>Ward 9.</i>	22	105	127
4 but under 5 years, .	1	92	93	3 months, . . .	-	1	1
5 but under 10 years, .	3	239	242	4 months, . . .	-	3	3
10 but under 15 years, .	7	78	85	6 months, . . .	-	4	4
15 but under 30 years, .	27	72	99	7 months, . . .	-	1	1
30 years and over, .	19	39	58	9 months, . . .	-	2	2
Not given, . . .	3	25	28	1 but under 2 years, .	-	9	9
<i>Ward 7.</i>	40	852	892	2 but under 3 years, .	-	3	3
2 months, . . .	-	1	1	3 but under 4 years, .	2	7	9
3 months, . . .	-	4	4	4 but under 5 years, .	-	5	5
4 months, . . .	-	11	11	5 but under 10 years, .	1	22	23
5 months, . . .	-	13	13	10 but under 15 years, .	3	11	14
6 months, . . .	-	26	26	15 but under 30 years, .	9	22	31
6½ months, . . .	-	2	2	30 years and over, .	6	14	20
7 months, . . .	-	15	15	Not given, . . .	1	1	2
8 months, . . .	-	19	19	<i>Ward 10.</i>	3	49	52
9 months, . . .	-	10	10	4 months, . . .	-	3	3
10 months, . . .	-	6	6	6 months, . . .	1	1	2
11 months, . . .	-	4	4	1 but under 2 years, .	-	2	2
1 but under 2 years, .	1	77	78	2 but under 3 years, .	-	2	2
2 but under 3 years, .	-	160	160	3 but under 4 years, .	-	1	1
3 but under 4 years, .	-	151	151	4 but under 5 years, .	-	2	2
4 but under 5 years, .	-	77	77	5 but under 10 years, .	-	7	7
5 but under 10 years, .	1	133	134	10 but under 15 years, .	-	5	5
10 but under 15 years, .	4	49	53	15 but under 30 years, .	2	12	14
15 but under 30 years, .	20	87	57	30 years and over, .	-	11	11
30 years and over, .	12	23	35	Not given, . . .	-	3	3
Not given, . . .	2	34	36				

WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION			WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION		
	Voters	Non- voters	Totals		Voters	Non- voters	Totals
<i>Ward 11.</i>	7	67	74	<i>Ward 13 — Con.</i>			
2 weeks, . . . .	-	1	1	15 but under 30 years, .	31	145	176
2 months, . . . .	-	2	2	30 years and over, .	35	60	95
4 months, . . . .	-	4	4	Not given, . . . .	6	25	31
6 months, . . . .	-	2	2	<i>Ward 14.</i>	67	243	315
7 months, . . . .	-	2	2	2 months, . . . .	-	1	1
8 months, . . . .	-	1	1	3 months, . . . .	-	1	1
1 but under 2 years, .	-	2	2	5 months, . . . .	-	2	2
2 but under 3 years, .	-	6	6	7 months, . . . .	-	2	2
3 but under 4 years, .	1	5	6	8 months, . . . .	-	1	1
4 but under 5 years, .	-	2	2	9 months, . . . .	-	3	3
5 but under 10 years, .	2	15	17	1 but under 2 years, .	1	7	8
10 but under 15 years, .	1	7	8	2 but under 3 years, .	-	10	10
15 but under 30 years, .	1	9	10	3 but under 4 years, .	-	16	16
30 years and over, .	2	5	7	4 but under 5 years, .	-	15	15
Not given, . . . .	-	4	4	5 but under 10 years, .	6	43	49
<i>Ward 12.</i>	39	252	291	10 but under 15 years, .	7	31	38
3 months, . . . .	-	1	1	15 but under 30 years, .	22	74	96
5 months, . . . .	-	1	1	30 years and over, .	29	36	65
6 months, . . . .	-	5	5	Not given, . . . .	2	6	8
7 months, . . . .	-	2	2	<i>Ward 15.</i>	64	215	279
8 months, . . . .	-	1	1	3 months, . . . .	-	1	1
9 months, . . . .	-	1	1	5 months, . . . .	-	1	1
11 months, . . . .	-	1	1	6 months, . . . .	-	1	1
1 but under 2 years, .	-	10	10	7 months, . . . .	-	1	1
2 but under 3 years, .	1	9	10	8 months, . . . .	-	1	1
3 but under 4 years, .	-	11	11	9 months, . . . .	-	2	2
4 but under 5 years, .	-	14	14	11 months, . . . .	-	1	1
5 but under 10 years, .	1	46	47	1 but under 2 years, .	-	5	5
10 but under 15 years, .	4	30	34	2 but under 3 years, .	-	8	8
15 but under 30 years, .	12	70	82	3 but under 4 years, .	-	10	10
30 years and over, .	17	36	53	4 but under 5 years, .	1	13	14
Not given, . . . .	4	14	18	5 but under 10 years, .	6	48	54
<i>Ward 13.</i>	93	678	771	10 but under 15 years, .	5	28	33
3 weeks, . . . .	-	1	1	15 but under 30 years, .	28	57	85
3 months, . . . .	-	2	2	30 years and over, .	22	35	57
4 months, . . . .	-	1	1	Not given, . . . .	2	3	5
5 months, . . . .	-	6	6	<i>Ward 16.</i>	50	382	432
6 months, . . . .	-	3	3	4 months, . . . .	-	4	4
7 months, . . . .	-	3	3	5 months, . . . .	-	3	3
8 months, . . . .	-	3	3	6 months, . . . .	-	6	6
9 months, . . . .	-	3	3	7 months, . . . .	-	3	3
10 months, . . . .	-	5	5	8 months, . . . .	-	4	4
1 but under 2 years, .	1	32	33	9 months, . . . .	-	2	2
2 but under 3 years, .	-	35	35	10 months, . . . .	-	2	2
3 but under 4 years, .	-	42	42	1 but under 2 years, .	-	15	15
4 but under 5 years, .	1	47	48	2 but under 3 years, .	2	44	46
5 but under 10 years, .	5	133	138	3 but under 4 years, .	-	35	35
10 but under 15 years, .	14	122	136				



WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION			WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION		
	Voters	Non- voters	Totals		Voters	Non- voters	Totals
<i>Ward 5 — Con.</i>				<i>Ward 8.</i>	89	556	595
3 but under 4 years, .	-	8	8	1 month, . . .	-	1	1
4 but under 5 years, .	2	5	7	3 months, . . .	-	1	1
5 but under 10 years, .	3	22	25	4 months, . . .	-	7	7
10 but under 15 years, .	2	23	25	5 months, . . .	-	3	3
15 but under 30 years, .	17	31	48	6 months, . . .	-	18	18
30 years and over, .	15	19	34	7 months, . . .	-	9	9
Not given, . . .	2	10	12	8 months, . . .	-	20	20
<i>Ward 6.</i>	61	1,001	1,062	8½ months, . . .	-	1	1
2 months, . . .	-	1	1	9 months, . . .	-	13	13
3 months, . . .	-	1	1	10 months, . . .	-	8	8
4 months, . . .	-	3	3	11 months, . . .	-	1	1
5 months, . . .	-	8	8	1 but under 2 years, .	-	49	49
6 months, . . .	-	17	17	2 but under 3 years, .	-	81	81
7 months, . . .	-	12	12	3 but under 4 years, .	1	86	87
8 months, . . .	-	13	13	4 but under 5 years, .	1	48	49
9 months, . . .	-	8	8	5 but under 10 years, .	4	88	92
10 months, . . .	-	11	11	10 but under 15 years, .	4	34	38
11 months, . . .	-	7	7	15 but under 30 years, .	10	48	58
1 but under 2 years, .	-	78	78	30 years and over, .	15	33	48
2 but under 3 years, .	-	155	155	Not given, . . .	4	7	11
3 but under 4 years, .	1	142	143	<i>Ward 9.</i>	22	105	127
4 but under 5 years, .	1	92	93	3 months, . . .	-	1	1
5 but under 10 years, .	3	239	242	4 months, . . .	-	3	3
10 but under 15 years, .	7	78	85	6 months, . . .	-	4	4
15 but under 30 years, .	27	72	99	7 months, . . .	-	1	1
30 years and over, .	19	39	58	9 months, . . .	-	2	2
Not given, . . .	3	25	28	1 but under 2 years, .	-	9	9
<i>Ward 7.</i>	40	852	892	2 but under 3 years, .	-	3	3
2 months, . . .	-	1	1	3 but under 4 years, .	2	7	9
3 months, . . .	-	4	4	4 but under 5 years, .	-	5	5
4 months, . . .	-	11	11	5 but under 10 years, .	1	22	23
5 months, . . .	-	13	13	10 but under 15 years, .	3	11	14
6 months, . . .	-	26	26	15 but under 30 years, .	9	22	31
6½ months, . . .	-	2	2	30 years and over, .	6	14	20
7 months, . . .	-	15	15	Not given, . . .	1	1	2
8 months, . . .	-	19	19	<i>Ward 10.</i>	3	49	52
9 months, . . .	-	10	10	4 months, . . .	-	3	3
10 months, . . .	-	6	6	6 months, . . .	1	1	2
11 months, . . .	-	4	4	1 but under 2 years, .	-	2	2
1 but under 2 years, .	1	77	78	2 but under 3 years, .	-	2	2
2 but under 3 years, .	-	160	160	3 but under 4 years, .	-	1	1
3 but under 4 years, .	-	151	151	4 but under 5 years, .	-	2	2
4 but under 5 years, .	-	77	77	5 but under 10 years, .	-	7	7
5 but under 10 years, .	1	133	134	10 but under 15 years, .	-	5	5
10 but under 15 years, .	4	49	53	15 but under 30 years, .	2	12	14
15 but under 30 years, .	20	87	57	30 years and over, .	-	11	11
30 years and over, .	12	23	35	Not given, . . .	-	3	3
Not given, . . .	2	34	36				

WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION			WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION		
	Voters	Non- voters	Totals		Voters	Non- voters	Totals
<i>Ward 11.</i>	7	67	74	<i>Ward 13 — Con.</i>			
2 weeks, . . .	-	1	1	15 but under 30 years, .	81	145	176
2 months, . . .	-	2	2	30 years and over, .	35	60	95
4 months, . . .	-	4	4	Not given, . . .	6	25	31
6 months, . . .	-	2	2	<i>Ward 14.</i>	67	248	315
7 months, . . .	-	2	2	2 months, . . .	-	1	1
8 months, . . .	-	1	1	3 months, . . .	-	1	1
1 but under 2 years, .	-	2	2	5 months, . . .	-	2	2
2 but under 3 years, .	-	6	6	7 months, . . .	-	2	2
3 but under 4 years, .	1	5	6	8 months, . . .	-	1	1
4 but under 5 years, .	-	2	2	9 months, . . .	-	3	3
5 but under 10 years, .	2	15	17	1 but under 2 years, .	1	7	8
10 but under 15 years, .	1	7	8	2 but under 3 years, .	-	10	10
15 but under 30 years, .	1	9	10	3 but under 4 years, .	-	16	16
30 years and over, .	2	5	7	4 but under 5 years, .	-	15	15
Not given, . . .	-	4	4	5 but under 10 years, .	6	43	49
<i>Ward 12.</i>	39	252	291	10 but under 15 years, .	7	31	38
3 months, . . .	-	1	1	15 but under 30 years, .	22	74	96
5 months, . . .	-	1	1	30 years and over, .	29	36	65
6 months, . . .	-	5	5	Not given, . . .	2	6	8
7 months, . . .	-	2	2	<i>Ward 15.</i>	64	215	279
8 months, . . .	-	1	1	3 months, . . .	-	1	1
9 months, . . .	-	1	1	5 months, . . .	-	1	1
11 months, . . .	-	1	1	6 months, . . .	-	1	1
1 but under 2 years, .	-	10	10	7 months, . . .	-	1	1
2 but under 3 years, .	1	9	10	8 months, . . .	-	1	1
3 but under 4 years, .	-	11	11	9 months, . . .	-	2	2
4 but under 5 years, .	-	14	14	11 months, . . .	-	1	1
5 but under 10 years, .	1	46	47	1 but under 2 years, .	-	5	5
10 but under 15 years, .	4	30	34	2 but under 3 years, .	-	8	8
15 but under 30 years, .	12	70	82	3 but under 4 years, .	-	10	10
30 years and over, .	17	36	53	4 but under 5 years, .	1	13	14
Not given, . . .	4	14	18	5 but under 10 years, .	6	48	54
<i>Ward 13.</i>	93	678	771	10 but under 15 years, .	5	28	33
3 weeks, . . .	-	1	1	15 but under 30 years, .	28	57	85
3 months, . . .	-	2	2	30 years and over, .	22	35	57
4 months, . . .	-	1	1	Not given, . . .	2	3	5
5 months, . . .	-	6	6	<i>Ward 16.</i>	50	382	432
6 months, . . .	-	8	8	4 months, . . .	-	4	4
7 months, . . .	-	3	3	5 months, . . .	-	3	3
8 months, . . .	-	3	3	6 months, . . .	-	6	6
9 months, . . .	-	8	8	7 months, . . .	-	3	3
10 months, . . .	-	5	5	8 months, . . .	-	4	4
1 but under 2 years, .	1	32	33	9 months, . . .	-	2	2
2 but under 3 years, .	-	35	35	10 months, . . .	-	2	2
3 but under 4 years, .	-	42	42	1 but under 2 years, .	-	15	15
4 but under 5 years, .	1	47	48	2 but under 3 years, .	2	44	46
5 but under 10 years, .	5	133	138	3 but under 4 years, .	-	35	35
10 but under 15 years, .	14	122	136				

WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION			WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION		
	Voters	Non- voters	Totals		Voters	Non- voters	Totals
<i>Ward 16—Con.</i>				<i>Ward 19—Con.</i>			
4 but under 5 years, .	1	27	28	15 but under 30 years, .	40	76	116
5 but under 10 years, .	3	96	99	30 years and over, .	15	51	66
10 but under 15 years, .	6	38	44	Not given, . . . .	5	8	13
15 but under 30 years, .	24	50	74				
30 years and over, .	18	41	54	<i>Ward 20.</i>	52	220	272
Not given, . . . .	1	12	13	1 month, . . . .	-	1	1
				5 months, . . . .	-	3	3
<i>Ward 17.</i>	52	139	191	7 months, . . . .	-	1	1
3 months, . . . .	-	1	1	10 months, . . . .	-	3	3
4 months, . . . .	-	2	2	1 but under 2 years, .	-	8	8
5 months, . . . .	-	1	1	2 but under 3 years, .	-	9	9
6 months, . . . .	-	2	2	3 but under 4 years, .	1	9	10
1 but under 2 years, .	-	4	4	4 but under 5 years, .	-	14	14
2 but under 3 years, .	-	7	7	5 but under 10 years, .	3	47	50
3 but under 4 years, .	-	2	2	10 but under 15 years, .	6	40	46
4 but under 5 years, .	1	5	6	15 but under 30 years, .	25	54	79
5 but under 10 years, .	5	24	29	30 years and over, .	17	29	46
10 but under 15 years, .	7	24	31	Not given, . . . .	-	2	2
15 but under 30 years, .	18	40	58				
30 years and over, .	16	24	40	<i>Ward 21.</i>	16	83	99
Not given, . . . .	5	3	8	3½ months, . . . .	-	1	1
				6 months, . . . .	-	1	1
<i>Ward 18.</i>	22	56	78	8 months, . . . .	-	2	2
3 months, . . . .	-	1	1	9 months, . . . .	-	1	1
9 months, . . . .	1	1	2	1 but under 2 years, .	-	4	4
1 but under 2 years, .	-	3	3	2 but under 3 years, .	-	4	4
2 but under 3 years, .	-	4	4	3 but under 4 years, .	-	4	4
3 but under 4 years, .	-	2	2	4 but under 5 years, .	-	3	3
4 but under 5 years, .	-	2	2	5 but under 10 years, .	2	14	16
5 but under 10 years, .	2	17	19	10 but under 15 years, .	4	8	12
10 but under 15 years, .	1	5	6	15 but under 30 years, .	4	24	28
15 but under 30 years, .	3	9	12	30 years and over, .	6	13	19
30 years and over, .	12	10	22	Not given, . . . .	-	4	4
Not given, . . . .	3	2	5				
				<i>Ward 22.</i>	62	270	332
<i>Ward 19.</i>	74	355	429	3 months, . . . .	-	1	1
3 months, . . . .	-	3	3	4 months, . . . .	-	1	1
5 months, . . . .	-	1	1	6 months, . . . .	-	1	1
6 months, . . . .	-	1	1	7 months, . . . .	1	2	3
7 months, . . . .	-	2	2	8 months, . . . .	-	3	3
8 months, . . . .	-	6	6	9 months, . . . .	-	2	2
9 months, . . . .	-	3	3	1 but under 2 years, .	-	14	14
10 months, . . . .	-	2	2	2 but under 3 years, .	-	21	21
11 months, . . . .	-	1	1	3 but under 4 years, .	2	16	18
1 but under 2 years, .	-	10	10	4 but under 5 years, .	1	18	19
2 but under 3 years, .	-	14	14	5 but under 10 years, .	12	67	79
3 but under 4 years, .	1	26	27	10 but under 15 years, .	7	40	47
4 but under 5 years, .	-	16	16	15 but under 30 years, .	25	38	63
5 but under 10 years, .	3	90	93	30 years and over, .	11	25	36
10 but under 15 years, .	10	45	55	Not given, . . . .	3	21	24

WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION			WARDS AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION		
	Voters	Non-voters	Totals		Voters	Non-voters	Totals
Ward 23.	46	121	167	Ward 24 — Con.			
6 months, . . . .	-	1	1	30 years and over, .	5	14	19
7 months, . . . .	-	1	1	Not given, . . . .	1	8	9
8 months, . . . .	-	1	1				
9 months, . . . .	-	3	3	Ward 25.	14	84	98
11 months, . . . .	-	1	1	4 months, . . . .	-	1	1
1 but under 2 years, .	-	5	5	5 months, . . . .	-	1	1
2 but under 3 years, .	-	3	3	6 months, . . . .	-	1	1
3 but under 4 years, .	1	4	5	8 months, . . . .	-	1	1
4 but under 5 years, .	-	7	7	9 months, . . . .	-	1	1
5 but under 10 years, .	3	41	44	11 months, . . . .	-	1	1
10 but under 15 years, .	10	15	25	1 but under 2 years, .	-	1	1
15 but under 30 years, .	17	20	37	2 but under 3 years, .	-	9	9
30 years and over, .	15	10	25	3 but under 4 years, .	1	9	10
Not given, . . . .	-	9	9	4 but under 5 years, .	1	5	6
				5 but under 10 years, .	3	19	22
Ward 24.	21	123	144	10 but under 15 years, .	4	8	12
3 months, . . . .	-	2	2	15 but under 30 years, .	5	13	18
6 months, . . . .	-	1	1	30 years and over, .	-	2	2
7 months, . . . .	-	1	1	Not given, . . . .	-	12	12
9 months, . . . .	-	1	1				
1 but under 2 years, .	-	2	2	Ward not Specified.	-	8	8
2 but under 3 years, .	-	6	6	2 but under 3 years, .	-	2	2
3 but under 4 years, .	-	6	6	3 but under 4 years, .	-	1	1
4 but under 5 years, .	-	2	2	5 but under 10 years, .	-	2	2
5 but under 10 years, .	1	26	27	15 but under 30 years, .	-	2	2
10 but under 15 years, .	3	22	25	Not given, . . . .	-	1	1
15 but under 30 years, .	11	32	43				

RECAPITULATION.

THE CITY, AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION			THE CITY, AND LENGTH OF TIME IN BOSTON.	POLITICAL CONDITION		
	Voters	Non-voters	Totals		Voters	Non-voters	Totals
THE CITY OF BOSTON.	1,029	6,431	7,460	THE CITY OF BOSTON — Con.			
2 weeks, . . . .	-	1	1	8½ months, . . . .	-	1	1
3 weeks, . . . .	-	1	1	9 months, . . . .	1	67	68
1 month, . . . .	-	2	2	10 months, . . . .	-	40	40
2 months, . . . .	-	6	6	11 months, . . . .	4	18	18
3 months, . . . .	-	20	20	1 but under 2 years, .	3	359	362
3½ months, . . . .	-	1	1	2 but under 3 years, .	4	619	623
4 months, . . . .	-	42	42	3 but under 4 years, .	13	617	630
5 months, . . . .	-	46	46	4 but under 5 years, .	12	433	445
6 months, . . . .	1	98	99	5 but under 10 years, .	76	1,300	1,376
6½ months, . . . .	-	2	2	10 but under 15 years, .	129	714	843
7 months, . . . .	1	61	62	15 but under 30 years, .	402	1,051	1,453
7½ months, . . . .	-	1	1	30 years and over, .	331	619	950
8 months, . . . .	-	77	77	Not given, . . . .	56	235	291

It was thought best to present the facts contained in the preceding table in considerable detail. The length of residence of applicants who had lived in the city less than one year is presented by months or weeks. Turning to the recapitulation, it will be seen that the greatest concentration of numbers appears among those who have lived in the city 5 but under 10 years, and those who have lived in the city 15 but under 30 years, these numbers being respectively 1,376 and 1,453.

In order to show plainly the number of applicants who had been in the city for a shorter period than one year, the following condensed analysis table is presented, in which the figures by wards are classified so as to show those who had been here less than one year or more than one year, with percentages:

WARDS AND CLASSIFICATION.	NUMBER			PERCENTAGES		
	Voters	Non-voters	Totals	Voters	Non-voters	Totals
<i>Ward 1.</i>	29	93	122	100.00	100.00	100.00
Under 1 year, . . . .	-	10	10	-	10.75	8.20
Over 1 year, . . . .	29	83	112	100.00	89.25	91.80
<i>Ward 2.</i>	10	135	145	100.00	100.00	100.00
Under 1 year, . . . .	-	7	7	-	5.19	4.83
Over 1 year, . . . .	10	128	138	100.00	94.81	95.17
<i>Ward 3.</i>	58	122	180	100.00	100.00	100.00
Under 1 year, . . . .	-	-	-	-	-	-
Over 1 year, . . . .	58	122	180	100.00	100.00	100.00
<i>Ward 4.</i>	47	84	131	100.00	100.00	100.00
Under 1 year, . . . .	-	2	2	-	2.38	1.53
Over 1 year, . . . .	47	82	129	100.00	97.62	98.47
<i>Ward 5.</i>	41	133	174	100.00	100.00	100.00
Under 1 year, . . . .	-	5	5	-	3.76	2.87
Over 1 year, . . . .	41	128	169	100.00	96.24	97.13
<i>Ward 6.</i>	61	1,001	1,062	100.00	100.00	100.00
Under 1 year, . . . .	-	81	81	-	8.09	7.63
Over 1 year, . . . .	61	920	981	100.00	91.91	92.37
<i>Ward 7.</i>	40	852	892	100.00	100.00	100.00
Under 1 year, . . . .	-	111	111	-	13.03	12.44
Over 1 year, . . . .	40	741	781	100.00	86.97	87.56
<i>Ward 8.</i>	39	556	595	100.00	100.00	100.00
Under 1 year, . . . .	-	82	82	-	14.75	13.78
Over 1 year, . . . .	39	474	513	100.00	85.25	86.22

WARDS AND CLASSIFICATION.	NUMBER			PERCENTAGES		
	Voters	Non-voters	Totals	Voters	Non-voters	Totals
<i>Ward 9.</i>	22	105	127	100.00	100.00	100.00
Under 1 year, . . . .	-	11	11	-	10.48	8.66
Over 1 year, . . . .	22	94	116	100.00	89.52	91.34
<i>Ward 10.</i>	8	49	52	100.00	100.00	100.00
Under 1 year, . . . .	1	4	5	83.33	8.16	9.62
Over 1 year, . . . .	2	45	47	66.67	91.84	90.38
<i>Ward 11.</i>	7	67	74	100.00	100.00	100.00
Under 1 year, . . . .	-	12	12	-	17.91	16.22
Over 1 year, . . . .	7	55	62	100.00	82.09	88.78
<i>Ward 12.</i>	89	252	291	100.00	100.00	100.00
Under 1 year, . . . .	-	12	12	-	4.76	4.12
Over 1 year, . . . .	89	240	279	100.00	95.24	95.88
<i>Ward 13.</i>	93	678	771	100.00	100.00	100.00
Under 1 year, . . . .	-	37	37	-	5.46	4.80
Over 1 year, . . . .	93	641	734	100.00	94.54	95.20
<i>Ward 14.</i>	67	248	315	100.00	100.00	100.00
Under 1 year, . . . .	-	10	10	-	4.08	3.17
Over 1 year, . . . .	67	238	305	100.00	95.97	96.83
<i>Ward 15.</i>	64	215	279	100.00	100.00	100.00
Under 1 year, . . . .	-	8	8	-	3.72	2.87
Over 1 year, . . . .	64	207	271	100.00	96.28	97.13
<i>Ward 16.</i>	50	382	432	100.00	100.00	100.00
Under 1 year, . . . .	-	24	24	-	6.28	5.56
Over 1 year, . . . .	50	358	408	100.00	93.72	94.44
<i>Ward 17.</i>	52	139	191	100.00	100.00	100.00
Under 1 year, . . . .	-	6	6	-	4.32	3.14
Over 1 year, . . . .	52	133	185	100.00	95.68	96.86
<i>Ward 18.</i>	22	56	78	100.00	100.00	100.00
Under 1 year, . . . .	1	2	3	4.55	3.57	3.85
Over 1 year, . . . .	21	54	75	95.45	96.43	96.15
<i>Ward 19.</i>	74	355	429	100.00	100.00	100.00
Under 1 year, . . . .	-	19	19	-	5.35	4.43
Over 1 year, . . . .	74	336	410	100.00	94.65	95.57
<i>Ward 20.</i>	52	220	272	100.00	100.00	100.00
Under 1 year, . . . .	-	8	8	-	3.64	2.94
Over 1 year, . . . .	52	212	264	100.00	96.36	97.06
<i>Ward 21.</i>	16	83	99	100.00	100.00	100.00
Under 1 year, . . . .	-	5	5	-	6.02	5.05
Over 1 year, . . . .	16	78	94	100.00	93.98	94.95

WARDS AND CLASSIFICATION.	NUMBER			PERCENTAGES		
	Voters	Non-voters	Totals	Voters	Non-voters	Totals
<i>Ward 22.</i>	62	270	332	100.00	100.00	100.00
Under 1 year, . . . .	1	10	11	1.61	3.70	3.31
Over 1 year, . . . .	61	260	321	98.39	96.30	96.69
<i>Ward 23.</i>	46	121	167	100.00	100.00	100.00
Under 1 year, . . . .	-	7	7	-	5.79	4.19
Over 1 year, . . . .	46	114	160	100.00	94.21	95.81
<i>Ward 24.</i>	21	123	144	100.00	100.00	100.00
Under 1 year, . . . .	-	5	5	-	4.07	3.47
Over 1 year, . . . .	21	118	139	100.00	95.93	96.53
<i>Ward 25.</i>	14	84	98	100.00	100.00	100.00
Under 1 year, . . . .	-	6	6	-	7.14	6.12
Over 1 year, . . . .	14	78	92	100.00	92.86	93.88
<i>Ward not Specified.</i>	-	8	8	-	100.00	100.00
Under 1 year, . . . .	-	-	-	-	-	-
Over 1 year, . . . .	-	8	8	-	100.00	100.00
<b>THE CITY OF BOSTON.</b>	<b>1,029</b>	<b>6,431</b>	<b>7,460</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
Under 1 year, . . . .	3	484	487	0.29	7.53	6.53
Over 1 year, . . . .	1,026	5,947	6,973	99.71	92.47	93.47

It will be seen from the aggregation for the city, at the close of this table, that out of 7,460, the total number of applicants, 6,973, or 93.47 per cent, a quite large proportion of the entire number, had resided in Boston, according to their own statement, more than one year. On the other hand, only 487, or 6.53 per cent, had resided here less than one year. The percentages indicating the periods of residence of non-voters vary but slightly from those just cited. Among the voters, only three are returned as having been in the city less than one year. This, of course, amounts to but a fractional percentage of the entire number. Practically it may be said that of the voters among the applicants, all had resided in the city more than one year.

The proportion of short-time residents in the different wards varies considerably. For instance, in ward 11, 16.22 per cent of the applicants had resided in the city less than one year. This is the largest percentage of this class which appears in any ward in the city, and a percentage considerably larger than appears in the city as a whole. In ward 6, where it

will be remembered the largest number of applicants appears, 7.63 per cent had resided in the city less than one year; in ward 13, where the largest amount was disbursed as wages, only 4.80 per cent of the applicants had resided here less than one year; in ward 7, where also a considerable number of applicants was found, 12.44 per cent had resided in the city less than one year; and in ward 8, 13.78 per cent were of this class. In the following wards, the percentage of applicants who had resided in the city less than one year was larger than the percentage for the city as a whole, the percentages in each case being annexed: Ward 1, 8.20; ward 6, 7.63; ward 7, 12.44; ward 8, 13.78; ward 9, 8.66; ward 10, 9.62; and ward 11, 16.22. The smallest proportion of short-time residents appears in ward 4, in which only 1.53 per cent were of this class.

The next table presents the ages of the applicants.

WARDS.	AGE PERIODS								Age Un-known	ALL AGES
	14 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 and over		
Ward 1, . . .	-	29	39	32	12	3	1	-	6	122
Ward 2, . . .	1	46	53	24	16	4	-	-	1	145
Ward 3, . . .	3	42	61	33	18	4	-	-	19	180
Ward 4, . . .	4	28	33	33	12	8	-	-	3	131
Ward 5, . . .	4	55	44	36	17	7	1	-	10	174
Ward 6, . . .	30	330	335	204	74	16	3	-	20	1,062
Ward 7, . . .	11	332	303	143	60	3	1	-	29	892
Ward 8, . . .	9	202	184	80	41	10	1	-	3	595
Ward 9, . . .	2	34	45	31	9	3	-	1	2	127
Ward 10, . . .	1	15	14	13	4	1	1	-	3	52
Ward 11, . . .	-	18	27	15	9	3	-	-	2	74
Ward 12, . . .	4	78	93	61	30	3	-	-	17	291
Ward 13, . . .	4	273	254	132	59	19	3	-	22	771
Ward 14, . . .	5	94	101	57	39	11	-	-	3	315
Ward 15, . . .	1	34	92	65	24	7	1	-	5	279
Ward 16, . . .	3	151	143	76	32	3	1	-	13	432
Ward 17, . . .	2	54	59	46	19	4	1	-	6	191
Ward 18, . . .	1	16	23	19	7	3	-	-	4	73
Ward 19, . . .	5	147	151	67	42	7	1	-	9	429
Ward 20, . . .	-	72	112	57	22	3	1	-	5	272
Ward 21, . . .	1	20	25	27	15	7	-	-	4	99
Ward 22, . . .	1	99	111	67	25	5	2	-	22	332
Ward 23, . . .	-	48	55	37	16	4	-	-	7	167
Ward 24, . . .	2	40	46	31	10	3	-	-	12	144
Ward 25, . . .	1	32	30	15	7	-	-	-	13	93
Ward not specified,	-	3	3	1	-	-	-	-	1	3
TOTALS, . . .	95	2,457	2,456	1,407	619	151	13	1	256	7,460



The ages of applicants presented in the preceding table, in accordance with their statements made to the committee, are classed by periods, beginning with those 14 to 19 years and continuing by periods of 10 years each, up to the age of 80. One applicant appeared in ward 9 who was over 80 years of age. Of the total number of applicants, 256 are returned with ages unknown. The greatest concentration of numbers appears in the age periods 20 to 29 and 30 to 39, these numbers being, respectively, 2,457 and 2,456; that is to say, uniting these two numbers, 4,913, nearly 66 per cent of the total number of applicants were in the prime of life, having passed their 20th year, but not being 40 years of age. Only 95 applicants, out of the total number, were under the age of 20; only 1,407 were found in the age period 40 to 49; and but 619 and 151 in the age periods 50 to 59 and 60 to 69, respectively. In the age period 70 to 79, 18 applicants appeared.

In order that the relative proportions of the applicants in the different age periods may be seen, the following analysis table, with percentages, is presented:

AGE PERIODS.	Number	Percent-ages	AGE PERIODS.	Number	Percent-ages
14 to 19 years, . . .	95	1.27	60 to 69 years, . . .	151	2.03
20 to 29 years, . . .	2,457	32.94	70 to 79 years, . . .	18	0.24
30 to 39 years, . . .	2,456	32.92	80 years and over, . . .	1	0.01
40 to 49 years, . . .	1,407	18.86	Age unknown, . . .	256	3.43
50 to 59 years, . . .	619	8.30	TOTALS, . . .	7,460	100.00

Referring to the percentages in the foregoing table, it will be seen that 1.27 per cent of the whole number was found in the age period 14 to 19 years; 32.94 and 32.92 per cent, respectively, in the age periods 20 to 29 and 30 to 39; 18.86 per cent in the age period 40 to 49; 8.30 per cent in the period 50 to 59; only 2.03 per cent in the period 60 to 69; and fractional percentages only in the periods above 70 years; 3.43 per cent of the entire number being returned as of age unknown.

The next table presents the occupations of the applicants.

OCCUPATIONS.	AGE PERIODS				Age Unknown	ALL AGES
	Under 21	21 but under 45	45 but under 60	60 and over		
Bakers, . . . . .	1	23	1	3	-	28
Barbers, . . . . .	1	14	1	-	-	16
Blacksmiths, . . . . .	1	29	15	2	-	47
Brakemen, . . . . .	1	9	-	-	1	11
Brass finishers, . . . . .	-	11	3	-	-	14
Bricklayers, . . . . .	-	18	5	1	-	24
Cabinet makers, . . . . .	-	23	7	-	2	32
Carpenters, . . . . .	2	140	41	14	11	208
Cigar makers, . . . . .	2	16	-	-	-	18
Clerks, . . . . .	2	31	4	-	1	38
Cooks, . . . . .	1	23	4	2	-	30
Engineers, . . . . .	-	22	8	1	-	31
Firemen, . . . . .	-	13	4	-	-	17
Fishermen, . . . . .	-	7	3	5	1	21
Gardeners, . . . . .	-	8	3	-	-	11
Gasfitters, . . . . .	-	8	2	-	-	10
Glaziers, . . . . .	-	10	-	-	-	10
Hod carriers, . . . . .	-	23	2	-	-	25
Hostlers, . . . . .	1	25	3	-	2	31
Iron moulders, . . . . .	-	14	4	2	-	20
Junk dealers, . . . . .	-	10	2	1	-	13
Laborers, . . . . .	67	3,080	741	81	146	4,115
Longshoremen, . . . . .	1	23	4	4	-	32
Machinists, . . . . .	1	68	15	2	2	88
Masons, . . . . .	-	37	5	1	-	43
Painters, . . . . .	1	130	30	1	7	169
Pavers, . . . . .	-	13	3	-	-	16
Peddlers, . . . . .	1	33	10	-	-	44
Plumbers, . . . . .	3	15	2	-	-	20
Pressmen, . . . . .	-	16	-	-	-	16
Pressmen (tailor work), . . . . .	-	16	1	-	1	18
Rag pickers, . . . . .	-	42	12	1	-	55
Salesmen, . . . . .	-	13	2	1	-	16
Shoemakers, . . . . .	1	62	12	2	3	80
Tailors, . . . . .	21	628	92	23	4	768
Teamsters, . . . . .	9	245	21	3	16	294
Tinsmiths, . . . . .	2	29	4	-	1	36
Upholsterers, . . . . .	-	9	4	-	-	13
Waiters, . . . . .	1	23	4	-	-	28
Watchmakers, . . . . .	-	7	-	-	-	7
Not given, . . . . .	3	3	4	-	33	43
Other occupations, . . . . .	39	689	120	21	25	894
TOTALS, . . . . .	162	5,068	1,203	171	256	7,400

The information contained in this table is for the city at large. The applicants have been classified under a series of occupation heads which include all the employments in which seven or more applicants were engaged. The occupation of 48

applicants was not given, and 894 applicants are classed under the head of "other occupations" not included in the table. These other occupations included the following :

Baggage handlers.  
Bar tenders.  
Bar tenders and waiters.  
Bell makers.  
Bill posters.  
Blacksmiths' helpers.  
Boiler makers.  
Boiler makers' helpers.  
Bookbinders.  
Bookkeepers.  
Bottlers.  
Bottle washers.  
Brakemen.  
Brass founders.  
Brass melters.  
Brass moulders.  
Brass polishers.  
Brass workers.  
Brewers.  
Bridge builders.  
Bridge workers.  
Bronzers.  
Brush makers.  
Buffers.  
Bushellers.  
Butchers.  
Button cutters.  
Button makers.  
Button-hole makers.  
Calkers.  
Candy makers.  
Canvassers.  
Cap makers.  
Car cleaners.  
Carpenters and engineers.  
Carpenters and upholsterers.  
Carpet layers.  
Carriage makers.  
Carriage painters.  
Carriage trimmers.  
Carriage washers.  
Carriagesmiths.  
Cementers.  
Chair makers.

Chair varnishers.  
Chemical workers.  
Clay workers.  
Clerks and drivers.  
Cloak makers.  
Clock makers.  
Cloth cutters.  
Cloth finishers.  
Cloth spongers.  
Clothes cleaners.  
Clothes pressers.  
Clothing cutters.  
Clothing cutters and pressers.  
Clothing examiners.  
Clothing trimmers.  
Coachmen.  
Coal heavers.  
Coal shovellers.  
Coat makers.  
Cobblers.  
Collectors.  
Compositors.  
Conductors.  
Confectioners.  
Contractors.  
Coopers.  
Coppersmiths.  
Cordage factory operatives.  
Core makers.  
Cork cutters.  
Cork makers.  
Cork sorters.  
Cornice makers.  
Cotton mill operatives.  
Cream workers (candy factory).  
Curriers.  
Diamond cutters.  
Draughtsmen.  
Drivers.  
Druggists.  
Dyers.  
Electricians.  
Electroplaters.  
Elevator tenders.

## Employés :

Blower works.	Garment makers.
Brickyard.	Gas and steam fitters.
Candy factory.	Gas meter makers.
Cider mill.	Gelatine printers.
Crockery store.	General work.
Factory.	Gilders.
Fish market.	Glass cutters.
Foundry.	Glass finishers.
Hardware store.	Glass makers.
Hay store.	Glove finishers.
Hotel.	Granite cutters.
Iron works.	Grocers.
Machine shop.	Gunmakers.
Piano factory.	Hack drivers.
Railroad.	Hair dressers.
Restaurant.	Hand organists.
Rope factory.	Harness makers.
Shoe factory.	Hat finishers.
Shoe store.	Hat makers.
Slaughter-house.	Hatters.
Sugar refinery.	Helpers (ice team).
Tailor shop.	Helpers (machine shop).
Telephone company	Helpers (plumbers).
Trimming store.	Herdic drivers.
Engineers and firemen.	House and furniture movers.
Engineers and laborers.	House cleaners.
Engineers' helpers.	House finishers.
Expressmen.	Ice cutters.
Farm hands.	Ice handlers.
File cutters.	Inspector of motors.
Finishers.	Instrument makers.
Finishers (tailor).	Iron finishers.
Firemen (kitchen).	Iron workers.
Firemen (locomotive)	Janitors.
Fishermen.	Jewellers.
Floor layers.	Jewelry makers.
Foremen (contractors).	Joiners.
Foremen (dyeing and finishing).	Junk sorters.
Foremen (laborers).	Kalsominers.
Foundrymen.	Lasters.
Frame makers.	Lathers.
Freight handlers.	Leather cutters.
Fruit peddlers and candy makers.	Leather workers.
Furniture dealers.	Ledgemen (gas company).
Furniture finishers.	Linemen.
Furniture movers.	Lithographers.
Furniture polishers.	Locksmiths.
Furriers.	Loom fixers.
	Lumbermen.

Machinists and firemen.  
Mailing clerks (newspaper)  
Managers (tool room).  
Marble cutters.  
Marble polishers.  
Marble workers.  
Marine engineers.  
Mariners.  
Marketmen.  
Mattress makers.  
Meat cutters.  
Metal polishers.  
Metal roofers.  
Milkmen.  
Millers.  
Mill hands.  
Millwrights.  
Miners.  
Morocco dressers.  
Morocco workers.  
Moulders.  
Musicians.  
News agents.  
Office boys.  
Oil-cloth printers.  
Operators.  
Organ makers.  
Packers.  
Painters and firemen.  
Painters and paper hangers.  
Painters and pressmen.  
Painters and whitewashers.  
Pantaloons cutters.  
Pantaloons finishers.  
Pantaloons makers.  
Pantrymen.  
Paper hangers.  
Passementerie makers.  
Piano finishers.  
Piano makers.  
Piano polishers.  
Piano stringers.  
Piano varnishers.  
Picture frame makers.  
Planers (lumber mill).  
Plasterers.  
Plasterers' tenders.  
Polishers.  
Porters.

Potters.  
Printers.  
Quarrymen.  
Ragmen.  
Rag sorters.  
Riggers.  
Roofers.  
Roofers' helpers.  
Rope makers.  
Rubber garment makers.  
Rubber mill operatives.  
Sail makers.  
Section hands.  
Setters-up (furnaces).  
Sewing-machine operatives (tailor shop).  
Shank makers.  
Sheet iron workers.  
Ship painters.  
Shippers.  
Shirt makers.  
Shoe cutters.  
Shoe factory operatives.  
Silk mill operatives.  
Silk weavers.  
Silversmiths.  
Slaters.  
Soapstone workers.  
Soda water makers.  
Sole cutters.  
Spring bed makers.  
Steam boiler tenders.  
Steamfitters.  
Steamfitters' helpers.  
Steel polishers.  
Stevedores.  
Stewards.  
Stone cutters.  
Stone drillers.  
Stone layers.  
Stone masons and pavers.  
Stone pavers.  
Stone pointers.  
Stone workers.  
Storekeepers.  
Suspender makers.  
Switchmen.  
Tailors and bookbinders.  
Tanners.

Teamsters and collectors.	Whitewashers.
Terra-cotta workers.	Whitewashers and paper hangers.
Thread mill operatives.	Wiremen.
Tinsmiths and painters.	Wire workers.
Tool dressers.	Wood carvers.
Tool sharpeners.	Wood finishers.
Truckmen.	Wood polishers.
Trunk makers.	Wood sawyers.
Umbrella makers.	Wood turners.
Varnishers.	Woodworkers.
Watchmen.	Woollen mill operatives.
Weavers.	Wool sorters.
Wheelwrights.	Yard men.

The table of classified occupations and the list of occupations in detail just presented, indicate the great variety of employments represented by the applicants.

Having presented this detail, we accompany it with the following analysis table, bringing forward all occupations in which more than 150 persons were found, in comparison with the aggregates, and accompanied by percentages :

OCCUPATIONS.	AGE PERIODS				Age Unknown	AGGREGATES	
	Under 21	21 but under 45	45 but under 60	60 and over		Number	Percentages
Carpenters, . . . .	2	140	41	14	11	208	2.79
Laborers, . . . .	67	3,080	741	81	146	4,115	55.16
Painters, . . . .	1	130	30	1	7	169	2.27
Tailors, . . . .	21	628	92	23	4	768	10.29
Teamsters, . . . .	9	245	21	3	16	294	3.94
Other occupations, .	62	1,445	278	49	72	1,906	25.55
TOTALS, . . . .	162	5,668	1,203	171	256	7,460	100.00

From this condensed summary, it is at once seen that while the variety of occupations was very great, nevertheless more than one-half the total number of applicants, that is to say, 4,115, or 55.16 per cent, were laborers. In other words, they were not skilled workmen. Of these, 3,080 were between the ages of 21 and 45 years. Leaving out of account 25.55 per cent of the total number who were diffused among a variety of occupations, and classed under the head of "other occupations" in this table, it will be noted that 768, or 10.29 per cent of the total

number, are classed as tailors; 294, or 3.94 per cent, were teamsters; 208, or 2.79 per cent, were carpenters; and 169, or 2.27 per cent, were painters. The carpenters and painters belong to trades which annually suffer by seasonal depressions; teamsters were probably affected by the prevailing industrial depression; and tailors also were thus affected. It should be remembered that the word "tailor," as used in the table, is used rather broadly, and applies to various occupations connected with the manufacture of clothing, but not necessarily including those who are sufficiently skilled to be called tailors in the strict acceptation of the word. Among the occupations in detail will be noticed pressmen, clothing cutters, clothing trimmers, and other occupations in which the applicant stated a distinct branch of work performed. All of these workmen felt the depression in the clothing industry. It was found in certain wards persons of particular occupations were in preponderance. For instance, in ward 6 the number of laborers who applied was 714, out of a total of 1,062 applicants; in ward 7, the number of laborers was 419, out of a total of 892 applicants; in this ward also the number of so-called tailors was 219; and in ward 8 was 190, out of a total of 595 applicants.

The next table shows the means of support relied upon by applicants during the period of unemployment. The information is for the city at large.

MEANS OF SUPPORT DURING PERIOD OF UNEMPLOYMENT.	SINGLE		MARRIED		WIDOWED AND NOT GIVEN		AGGREGATES	
	Num- ber of Appli- cants	Number of Depend- ents	Num- ber of Appli- cants	Number of Depend- ents	Num- ber of Appli- cants	Number of Depend- ents	Num- ber of Appli- cants	Number of Depend- ents
THE CITY OF BOSTON.	1,183	2,149	6,047	19,616	230	519	7,460	22,284
Begging of children, and pick- ing up coal on the street, .	-	-	1	6	-	-	1	6
Credit, . . . . .	-	-	10	29	1	-	11	29
Credit and goods pledged (pawn broker), . . . .	-	-	1	3	-	-	1	3
Credit and help, . . . .	-	-	2	6	-	-	2	6
Credit and relatives, . .	-	-	1	5	-	-	1	5
Credit and sold furniture, .	-	-	1	4	-	-	1	4
Credit, help, and earnings (son), . . . . .	-	-	1	6	-	-	1	6
Earnings (daughter), . .	-	-	1	2	-	-	1	2
Earnings (sister), . . .	1	2	-	-	-	-	1	2
Earnings (son), . . . .	-	-	8	82	-	-	8	82
Earnings (wife), . . . .	-	-	5	25	-	-	5	25

MEANS OF SUPPORT DURING PERIOD OF UNEM- PLOYMENT.	SINGLE		MARRIED		WIDOWED AND NOT GIVEN		AGGREGATES	
	Num- ber of Appli- cants	Number of Depend- ents	Num- ber of Appli- cants	Number of Depend- ents	Num- ber of Appli- cants	Number of Depend- ents	Num- ber of Appli- cants	Number of Depend- ents
<b>THE CITY OF BOSTON — Con.</b>								
Help and savings, . . .	-	-	1	3	-	-	1	3
Help (boarder), . . .	-	-	1	2	-	-	1	2
Help (brother), . . .	2	2	-	-	-	-	2	2
Help (brother and sister), .	1	3	-	-	-	-	1	3
Help (charity), . . .	3	3	33	133	1	3	37	139
Help (children), . . .	-	-	6	20	-	-	6	20
Help (church), . . .	-	-	1	3	-	-	1	3
Help (daughter), . . .	-	-	6	22	1	1	7	23
Help (father), . . .	-	-	1	2	-	-	1	2
Help (friends), . . .	9	19	17	50	1	-	27	69
Help (friends and charity), .	-	-	1	2	-	-	1	2
Help (married children), .	-	-	1	4	-	-	1	4
Help (mother), . . .	1	4	-	-	-	-	1	4
Help (mother-in-law), . .	-	-	1	3	-	-	1	3
Help (occasional), . . .	-	-	2	6	-	-	2	6
Help (partly charity), . .	1	5	-	-	-	-	1	5
Help (relatives), . . .	-	-	1	1	-	-	1	1
Help (sister), . . .	3	5	1	2	-	-	4	7
Help (son), . . .	-	-	5	18	-	-	5	18
Help (various sources), .	2	10	3	12	-	-	5	22
Help (wife), . . .	-	-	30	71	-	-	30	71
Help (wife and charity), .	-	-	1	3	-	-	1	3
Help (wife and daughter), .	-	-	1	3	-	-	1	3
Income from store, . . .	1	2	1	1	-	-	2	3
Lodgers, . . .	-	-	1	4	-	-	1	4
No assistance, . . .	316	618	1,331	5,353	33	216	2,230	6,699
Not given, . . .	447	737	1,923	6,443	62	94	2,432	7,274
Odd jobs, . . .	266	519	1,240	3,979	61	138	1,567	4,636
Odd jobs and credit, . . .	-	-	1	3	-	-	1	3
Odd jobs and earnings (son),	-	-	2	7	-	-	2	7
Odd jobs and help, . . .	1	1	9	33	-	-	10	39
Odd jobs and help (daughter),	-	-	1	6	-	-	1	6
Odd jobs and help (friend), .	-	-	2	5	-	-	2	5
Odd jobs and help (mother),	1	2	-	-	1	2	2	4
Odd jobs and help (neighbor),	-	-	1	2	-	-	1	2
Odd jobs and help (wife), .	-	-	2	6	-	-	2	6
Odd jobs and savings, . . .	-	-	4	16	-	-	4	16
Odd jobs, credit, and help, .	1	2	1	2	-	-	2	4
Odd jobs, savings, and help,	-	-	1	3	-	-	1	3
Savings, . . .	126	213	879	2,754	19	63	1,024	3,030
Savings and goods pledged (pawn broker), . . .	-	-	1	6	-	-	1	6
Savings and help (friend), .	-	-	1	4	-	-	1	4
Savings and help (relatives and friends), . . .	1	2	-	-	-	-	1	2
Savings and help (wife and charity), . . .	-	-	1	5	-	-	1	5
Savings, credit, and sold ef- fects, . . .	-	-	1	1	-	-	1	1



In the preceding table the applicants are classed as "single," "married," "widowed and not given," and the various means of support are specified in detail. It should be understood, however, that the classification as to whether single or married is far from accurate. As soon as it was understood that work was mainly to be given to those who were married and had families dependent upon them for support, most of the applicants stated that they were married. In many cases subsequent investigation disclosed that this statement was incorrect, and in general, only partial reliance can be placed upon the specification as to whether single or married.

Taking the information, however, as it stands in the table, 1,183 are classed as single and 6,047 as married. It will be seen that the number of dependents upon applicants classed as single was 2,149, and the number of dependents upon those classed as married, 19,616. There are 230 applicants classed as widowed or conjugal condition not given, and these applicants had 519 dependents. Altogether, 7,460 applicants had 22,284 persons depending upon them for support.

It will be noticed that by far the larger portion of the applicants either had no assistance, which practically means no means of support during the period of unemployment, or the

	OCCUPATIONS.	APPLICANTS HAVING OTHER WAGE EARNERS IN FAMILY			
		Number of Applicants	Number of Other Wage Earners	Totals	Number of Dependents
1	Bakers, . . . . .	2	4	6	3
2	Barbers, . . . . .	1	1	2	3
3	Blacksmiths, . . . . .	5	8	13	17
4	Brakemen, . . . . .	-	-	-	-
5	Brass finishers, . . . . .	2	3	5	6
6	Bricklayers, . . . . .	1	5	6	-
7	Cabinet makers, . . . . .	1	1	2	5
8	Carpenters, . . . . .	17	24	41	59
9	Cigar makers, . . . . .	-	-	-	-
10	Clerks, . . . . .	3	7	10	9
11	Cooks, . . . . .	5	5	10	12
12	Engineers, . . . . .	2	2	4	9
13	Firemen, . . . . .	-	-	-	-
14	Fishermen, . . . . .	1	1	2	5
15	Gardeners, . . . . .	1	1	2	6
16	Gasfitters, . . . . .	-	-	-	-
17	Glaziers, . . . . .	2	2	4	3

means of support was not given. Under the first head reported as having no assistance, 2,230 are found, having 6,689 dependents; under the head "not given" will be found 2,432, having 7,274 dependents. Passing these two classes, the greatest aggregation in numbers, namely, 1,567 applicants, will be found to have had odd jobs during the period of unemployment, and the number of dependents who relied upon these persons was 4,636. The other applicants may be found classed under various means of support. Eleven of them stated that they relied upon credit; 37 others will be found to have received help from charitable sources; 27 others were helped by friends; a few others, varying in number under the different heads specified, received help from relatives or from the earnings of relatives, or from such sources with the assistance of credit, or relied upon other temporary means of support specified in the table.

The next table relates to the occupations of applicants, showing for the city at large, using the occupation heads that appeared in the table on page 155, the number of applicants of each occupation having other wage earners in the family, the number not having other wage earners in the family, and the number of dependents in each case.

APPLICANTS NOT HAVING OTHER WAGE EARNERS IN FAMILY		AGGREGATES					
Number of Applicants	Number of Dependents	Number of Applicants	Number of Other Wage Earners	Total of Ap- plicants and Wage Earners	Number of Dependents	Total Number of Persons	
26	86	28	4	32	89	121	1
15	40	16	1	17	43	60	2
42	141	47	8	55	158	213	3
11	32	11	-	11	32	43	4
12	40	14	3	17	46	66	5
23	80	24	5	29	80	109	6
31	114	32	1	33	119	152	7
191	641	208	24	232	600	832	8
18	62	18	-	18	62	80	9
35	85	38	7	45	94	139	10
25	70	30	5	35	82	117	11
29	83	31	2	33	92	125	12
17	51	17	-	17	51	68	13
20	50	21	1	22	55	77	14
10	34	11	1	12	40	52	15
10	27	10	-	10	27	37	16
8	36	10	2	12	39	51	17

	OCCUPATIONS.	APPLICANTS HAVING OTHER WAGE EARNERS IN FAMILY			
		Number of Applicants	Number of Other Wage Earners	Totals	Number of Dependents
1	Hod carriers, . . . . .	-	-	-	-
2	Hostlers, . . . . .	2	3	5	7
3	Iron moulders, . . . . .	-	-	-	-
4	Junk dealers, . . . . .	-	-	-	-
5	Laborers, . . . . .	169	217	386	613
6	Longshoremen, . . . . .	1	1	2	2
7	Machinists, . . . . .	4	7	11	7
8	Masons, . . . . .	-	-	-	-
9	Painters, . . . . .	4	5	9	10
10	Pavers, . . . . .	1	2	3	8
11	Peddlers, . . . . .	5	5	10	23
12	Plumbers, . . . . .	2	2	4	6
13	Pressmen, . . . . .	2	3	5	1
14	Pressmen (tailor work), . . . . .	4	7	11	14
15	Rag pickers, . . . . .	-	-	-	-
16	Salesmen, . . . . .	-	-	-	-
17	Shoemakers, . . . . .	2	4	6	15
18	Tailors, . . . . .	28	32	60	113
19	Teamsters, . . . . .	14	15	29	42
20	Tinsmiths, . . . . .	2	2	4	5
21	Upholsterers, . . . . .	1	1	2	4
22	Walters, . . . . .	1	3	4	2
23	Watchmakers, . . . . .	1	4	5	-
24	Not given, . . . . .	-	-	-	-
25	Other occupations, . . . . .	67	88	155	225
26	TOTALS, . . . . .	353	465	818	1,234

We may illustrate the method to be employed in reading this table by noting that the first line shows that two applicants who were bakers had four wage earners in their families, the total number of wage earners connected with these applicants being six, and the number of dependents, other than wage earners, being three. Other applicants who were bakers without other wage earners in their families numbered 26, with 86 persons dependent upon them. Uniting the two classes of bakers, we find under that head 28 applicants having altogether four other wage earners in their families. The number of dependents relying upon these applicants and wage earners was 89; there were, therefore, 121 persons who were connected with the bakers among the applicants who were out of employment.

Again, taking the largest class of applicants, namely, labor-

APPLICANTS NOT HAVING OTHER WAGE EARNERS IN FAMILY		AGGREGATES					
Number of Applicants	Number of Dependents	Number of Applicants	Number of Other Wage Earners	Total of Ap- plicants and Wage Earners	Number of Dependents	Total Number of Persons	
25	70	25	-	25	70	95	1
29	71	31	3	34	78	112	2
20	64	20	-	20	64	84	3
13	48	13	-	13	48	61	4
3,946	11,627	4,115	217	4,332	12,240	16,572	5
31	90	32	1	33	92	125	6
84	231	88	7	95	238	333	7
43	161	43	-	43	161	204	8
165	450	169	5	174	460	634	9
15	46	16	2	18	54	72	10
44	139	49	5	54	162	216	11
18	59	20	2	22	65	87	12
14	56	16	3	19	57	76	13
14	48	18	7	25	62	87	14
55	194	55	-	55	194	249	15
16	26	16	-	16	26	42	16
78	267	80	4	84	282	366	17
740	2,309	768	32	800	2,422	3,222	18
289	809	294	15	309	851	1,160	19
34	105	36	2	38	110	148	20
12	31	13	1	14	35	49	21
27	62	28	3	31	64	95	22
6	17	7	4	11	17	28	23
48	71	48	-	48	71	119	24
827	2,427	894	33	927	2,652	3,579	25
7,107	21,050	7,460	465	7,925	22,284	30,209	26

ers, we find that there were 169 of this class who had other wage earners in their families, the number of such other wage earners being 217, making the total number of wage earners connected with these families, 386, the number of dependents being 613. On the other hand, there were 3,946 laborers among the applicants who had no other wage earners in their families, and upon them 11,627 persons were dependent. Uniting these two classes, we have, in the aggregate, 4,115 laborers, having in their families 217 other wage earners, making the total number of applicants and wage earners among the laborers, 4,332; and depending upon them were 12,240 persons, resulting in a total of 16,572 persons who were directly dependent upon the applicants classed as laborers. It is not necessary to pursue the analysis further. The final line of the table, in which totals are presented, indicates that as to all the

applicants included under the various occupation heads, 353 had other wage earners to the number of 465 in their families. This gives, in the aggregate, 818 wage earners in the families of these applicants, and upon them 1,234 persons were dependent. On the other hand, 7,107 applicants had no other wage earners in their families, and upon these applicants 21,050 persons were dependent.

Considering the applicants in the aggregate, the number being 7,460, there were but 465 other wage earners connected with their families; the total number of applicants and wage earners connected with them being 7,925, the number of dependents being 22,284; or a grand total of 30,209 persons who were

	OCCUPATIONS.	NO WORK SINCE OUT OF EMPLOYMENT		
		Number of Applicants	Aggregate Time out of Employment (months)	Average Time out of Employment (months)
1	Bakers, . . . . .	18	90	5.00
2	Barbers, . . . . .	6	14	2.33
3	Blacksmiths, . . . . .	29	117	4.03
4	Brakemen, . . . . .	5	12	2.40
5	Brass finishers, . . . . .	6	25	4.17
6	Bricklayers, . . . . .	13	31	2.38
7	Cabinet makers, . . . . .	16	57	3.56
8	Carpenters, . . . . .	121	328	2.71
9	Cigar makers, . . . . .	15	86	5.73
10	Clerks, . . . . .	24	117	4.88
11	Cooks, . . . . .	22	45	2.05
12	Engineers, . . . . .	16	45	2.81
13	Firemen, . . . . .	10	31	3.10
14	Fishermen, . . . . .	13	26	2.00
15	Gardeners, . . . . .	7	35	5.00
16	Gasfitters, . . . . .	5	9	1.80
17	Glaziers, . . . . .	3	14	4.67
18	Hod carriers, . . . . .	17	48	2.82
19	Hostlers, . . . . .	16	27	1.69
20	Iron moulders, . . . . .	12	41	3.42
21	Junk dealers, . . . . .	10	27	2.70
22	Laborers, . . . . .	2,107	5,807	2.76
23	Longshoremen, . . . . .	14	31	2.21
24	Machinists, . . . . .	56	210	3.75
25	Masons, . . . . .	30	83	2.77
26	Painters, . . . . .	97	292	3.01
27	Pavers, . . . . .	12	42	3.50
28	Peddlers, . . . . .	23	77	3.35
29	Plumbers, . . . . .	7	17	2.43
30	Pressmen, . . . . .	14	57	4.07
31	Pressmen (tailor work), . . . . .	9	36	4.00
32	Rag pickers, . . . . .	22	68	3.09

connected with the whole number of applicants who applied for work-relief at the Court House.

The final table of this series relates to occupations, and classifies the number of applicants of different occupations so as to show those who had received no work after being thrown out of employment before receiving work-relief, and also the number who had obtained odd jobs in the interim, with information under each head as to the aggregate time out of employment, the average time out of employment, the aggregate amount of work-relief, and the average amount of work-relief. The table also shows the number under each occupation who did not receive work-relief, and the total number of applicants.

NO WORK SINCE OUT OF EMPLOYMENT		ODD JOBS SINCE OUT OF EMPLOYMENT			Number of Persons not Supplied with Work-Relief	Total Number of Applicants	
Aggregate Amount of Work-Relief	Average Amount of Work-Relief	Number of Applicants	Aggregate Amount of Work-Relief	Average Amount of Work-Relief			
\$184.00	\$10.22	4	\$43.50	\$10.88	6	28	1
60.00	10.00	3	41.00	14.67	7	16	2
206.75	9.20	9	68.50	7.61	9	47	3
34.50	6.90	5	36.00	7.20	1	11	4
62.00	10.33	4	39.00	9.75	4	14	5
123.00	9.46	5	40.50	8.10	6	24	6
150.00	9.38	12	124.50	10.38	4	32	7
968.50	7.92	43	299.50	6.97	44	208	8
115.50	7.70	1	24.00	24.00	2	18	9
262.75	10.95	3	29.75	9.92	11	38	10
216.50	9.84	7	58.50	8.36	1	30	11
100.50	6.28	12	158.00	13.17	3	31	12
130.50	13.05	3	34.50	11.50	4	17	13
96.00	7.38	2	46.50	23.25	6	21	14
76.00	10.86	2	22.00	11.00	2	11	15
55.50	11.10	2	18.00	9.00	3	10	16
16.50	5.50	3	18.00	6.00	4	10	17
120.00	7.06	4	54.00	13.50	4	25	18
178.50	11.16	6	39.00	11.13	7	31	19
93.00	7.75	6	66.00	11.00	2	20	20
89.25	8.93	2	42.00	21.00	1	13	21
25,634.00	12.17	987	11,762.00	11.92	1,021	4,115	22
123.00	8.79	12	76.50	6.38	6	32	23
549.25	9.81	17	285.50	16.79	15	88	24
261.50	8.72	8	63.00	7.88	5	43	25
810.75	8.36	41	397.50	9.70	31	169	26
171.50	14.29	3	43.50	14.50	1	16	27
149.25	6.49	15	140.50	9.37	11	49	28
61.50	8.79	8	71.25	8.91	5	20	29
173.50	12.39	1	13.50	13.50	1	16	30
109.50	12.17	6	72.00	12.00	3	18	31
164.50	7.48	20	214.00	10.70	13	55	32

	OCCUPATIONS.	NO WORK SINCE OUT OF EMPLOYMENT		
		Number of Applicants	Aggregate Time out of Employment (months)	Average Time out of Employment (months)
1	Salesmen, . . . . .	10	84	3.40
2	Shoemakers, . . . . .	85	129	3.00
3	Tailors, . . . . .	434	1,710	3.94
4	Teamsters, . . . . .	158	395	2.50
5	Tinsmiths, . . . . .	26	82	3.15
6	Upholsterers, . . . . .	3	9	3.00
7	Walters, . . . . .	19	82	4.32
8	Watchmakers, . . . . .	6	18	3.00
9	Not given, . . . . .	35	23	0.63
10	Other occupations, . . . . .	526	1,734	3.30
11	TOTALS, . . . . .	4,026	12,160	3.02

The information contained in this table applies to the city at large. It is not only interesting, but easily grasped. Take, for instance, the first line of the table. It appears that 18 bakers who applied for work-relief had received no work, after being thrown out of employment, prior to their application. The aggregate time out of employment amounted to 90 months; that is, was equivalent to 90 months' unemployment for one man. The average time out of employment was five months. The aggregate amount of work-relief furnished to these bakers amounted to \$184, or an average amount of \$10.22 per man. Besides these, there were four bakers who applied for work-relief who had received odd jobs after being thrown out of employment and before their application. These men received work-relief to the amount of \$43.50, or an average amount of \$10.88 per man. There were six bakers who were not supplied with work-relief, making the total number of persons of this occupation who applied, 28.

Consider also the most numerous class represented, the laborers. Of these, 2,107 had obtained no work, after being thrown out of employment, before applying for relief. The aggregate time out of employment amounted to 5,807 months, or was equivalent to 5,807 months' unemployment for one man. The average time out of employment was 2.76 months. These persons received work-relief amounting, in the aggregate, to \$25,634, but this was only \$12.17 per man, on the average.

NO WORK SINCE OUT OF EMPLOYMENT		ODD JOBS SINCE OUT OF EMPLOYMENT			Number of Persons not Supplied with Work-Relief	Total Number of Applicants	
Aggregate Amount of Work-Relief	Average Amount of Work-Relief	Number of Applicants	Aggregate Amount of Work-Relief	Average Amount of Work-Relief			
\$103.50	\$10.35	2	\$15.00	\$7.50	4	16	1
283.50	8.10	23	219.50	9.98	23	80	2
4,541.00	10.46	159	1,822.00	11.46	175	768	3
1,548.00	9.80	73	718.25	9.84	63	294	4
193.50	7.44	5	31.50	6.30	5	36	5
37.50	12.50	6	40.50	6.75	4	13	6
168.00	8.84	3	30.00	10.00	6	28	7
33.00	6.60	1	7.50	7.50	1	7	8
409.50	11.44	2	27.00	13.50	11	48	9
5,206.25	9.90	204	2,434.75	11.94	164	894	10
\$44,112.25	\$10.96	1,735	\$19,841.00	\$11.44	1,699	7,460	11

There were 987 other laborers who applied who had obtained odd jobs after being thrown out of regular employment, and these men received work-relief amounting to \$11,762, or an average of \$11.92 per man. There were 1,021 other laborers who applied, but who did not receive work-relief, the aggregate number of laborers applying being 4,115.

The significance of these figures lies in the fact that, while in most cases the men had been out of employment for a considerable length of time on the average, for instance, in the case of the bakers who received work-relief, five months, and in the case of the laborers, 2.76 months, nevertheless, the amount of work-relief which they received, although aggregating a large sum, amounted on the average to scarcely more than one week's pay each. This statement, in general, applies to all persons of the different occupations represented in the table, but the figures need not be followed in detail.

The next series of tables relates to the work furnished to women at the Bedford street work-rooms. This work was also paid for from funds under the control of the Citizens Relief Committee, the administration of the work-rooms being, as stated, in the hands of a sub-committee composed of women.

The first table presents, by wards and precincts, the number of applicants discriminated as to native and foreign born, the number supplied or not supplied with work-relief, the number



of days' work furnished at 80 cents per day, and the total value of work-relief, that is, the total amount of wages paid for work done.

WARDS AND PRECINCTS.	APPLICANTS				WORK-RELIEF			Number of Days' Work at 80 Cents per Day	Value of Work- Relief
	Native Born	Foreign Born	Birth- place not Given	Totals	Number Supplied	Number not Supplied	Totals		
<i>Ward 1.</i>	21	19	8	48	36	12	48	369	\$295.20
Precinct 1, . .	5	6	3	14	11	3	14	135	108.00
Precinct 2, . .	1	1	2	4	3	1	4	21	16.80
Precinct 3, . .	1	2	-	3	1	2	3	18	14.40
Precinct 4, . .	1	-	1	2	2	-	2	15	12.00
Precinct 6, . .	1	2	1	4	2	2	4	12	9.60
Precinct 7, . .	7	5	-	12	11	1	12	111	88.80
Precinct 8, . .	5	1	1	7	4	3	7	36	28.80
Precinct 9, . .	-	2	-	2	2	-	2	21	16.80
<i>Ward 2.</i>	14	50	11	75	62	13	75	711	\$568.80
Precinct 1, . .	1	10	4	15	14	1	15	150	120.00
Precinct 2, . .	2	7	2	11	8	3	11	99	79.20
Precinct 3, . .	1	4	2	7	6	1	7	51	40.80
Precinct 4, . .	2	9	2	13	9	4	13	114	91.20
Precinct 5, . .	4	11	-	15	12	3	15	168	134.40
Precinct 6, . .	2	6	-	8	7	1	8	69	55.20
Precinct 7, . .	2	3	1	6	6	-	6	60	48.00
<i>Ward 3.</i>	17	31	3	51	40	11	51	477	\$381.60
Precinct 1, . .	3	1	-	4	2	2	4	33	26.40
Precinct 2, . .	-	3	2	5	4	1	5	51	40.80
Precinct 3, . .	-	1	-	1	1	-	1	9	7.20
Precinct 4, . .	6	10	-	16	13	3	16	156	124.80
Precinct 5, . .	4	14	1	19	15	4	19	171	136.80
Precinct 6, . .	4	2	-	6	5	1	6	57	45.60
<i>Ward 4.</i>	21	16	16	53	37	16	53	486	\$388.80
Precinct 1, . .	7	6	1	14	13	1	14	162	129.60
Precinct 2, . .	3	2	3	8	6	2	8	96	76.80
Precinct 3, . .	3	2	2	7	6	1	7	63	50.40
Precinct 4, . .	-	2	3	5	3	2	5	33	26.40
Precinct 5, . .	5	2	3	10	4	6	10	75	60.00
Precinct 6, . .	3	2	4	9	5	4	9	57	45.60
<i>Ward 5.</i>	13	35	7	55	45	10	55	444	\$355.20
Precinct 1, . .	1	1	-	2	1	1	2	3	2.40
Precinct 2, . .	1	4	1	6	6	-	6	57	45.60
Precinct 3, . .	4	14	1	19	16	3	19	168	134.40
Precinct 4, . .	1	6	1	8	7	1	8	69	55.20
Precinct 5, . .	1	6	1	8	6	2	8	39	31.20
Precinct 6, . .	5	4	3	12	9	3	12	108	86.40

WARDS AND PRECINCTS.	APPLICANTS				WORK-RELIEF			Number of Days' Work at 80 Cents per Day	Value of Work- Relief
	Native Born	Foreign Born	Birth- place not Given	Totals	Number Supplied	Number not Supplied	Totals		
<i>Ward 6.</i>	42	222	81	296	231	64	295	2,610	\$2,088.00
Precinct 1, . .	13	52	11	76	57	19	76	681	544.80
Precinct 2, . .	5	51	12	68	52	16	68	633	506.40
Precinct 3, . .	15	41	6	62	53	9	62	585	468.00
Precinct 4, . .	3	27	1	31	24	7	31	204	163.20
Precinct 5, . .	6	51	1	58	45	13	58	507	405.60
<i>Ward 7.</i>	24	231	32	287	221	66	287	2,220	\$1,776.00
Precinct 1, . .	7	23	4	34	30	4	34	297	237.60
Precinct 2, . .	1	47	5	53	43	10	53	414	331.20
Precinct 3, . .	4	44	10	58	43	15	58	383	314.40
Precinct 4, . .	5	49	8	62	44	18	62	432	345.60
Precinct 5, . .	7	68	5	80	61	19	80	684	547.20
<i>Ward 8.</i>	48	298	50	391	317	74	391	3,322	\$3,057.60
Precinct 1, . .	9	10	6	25	18	7	25	156	124.80
Precinct 2, . .	3	10	1	14	13	1	14	129	108.20
Precinct 3, . .	7	32	6	45	39	6	45	513	410.40
Precinct 4, . .	14	111	16	141	112	29	141	1,338	1,070.40
Precinct 5, . .	8	63	10	81	64	17	81	816	652.80
Precinct 6, . .	7	67	11	85	71	14	85	870	696.00
<i>Ward 9.</i>	40	38	19	97	75	22	97	789	\$631.20
Precinct 1, . .	2	2	2	6	4	2	6	60	48.00
Precinct 2, . .	6	2	4	12	9	3	12	90	72.00
Precinct 3, . .	8	6	3	17	15	2	17	141	112.80
Precinct 4, . .	7	5	4	16	14	2	16	147	117.60
Precinct 5, . .	17	23	6	46	33	13	46	351	280.80
<i>Ward 10.</i>	13	18	19	50	28	22	50	294	\$235.20
Precinct 1, . .	1	-	4	5	5	-	5	45	36.00
Precinct 2, . .	-	-	1	1	1	-	1	6	4.80
Precinct 3, . .	3	2	1	6	2	4	6	30	24.00
Precinct 4, . .	9	16	13	38	20	18	38	213	170.40
<i>Ward 11.</i>	26	36	24	86	62	24	86	606	\$484.80
Precinct 4, . .	-	1	-	1	1	-	1	3	2.40
Precinct 5, . .	11	17	10	38	26	12	38	267	213.60
Precinct 6, . .	11	16	9	36	26	10	36	246	196.80
Precinct 7, . .	-	-	2	2	2	-	2	12	9.60
Precinct 8, . .	1	1	-	2	1	1	2	3	2.40
Precinct 9, . .	2	1	2	5	4	1	5	69	55.20
Precinct 11, . .	1	-	1	2	2	-	2	6	4.80
<i>Ward 12.</i>	82	176	64	322	240	82	322	2,430	\$1,944.00
Precinct 1, . .	16	32	6	54	38	16	54	390	312.00
Precinct 2, . .	14	33	9	56	42	14	56	426	340.80
Precinct 3, . .	21	53	21	95	70	25	95	669	535.20

WARDS AND PRECINCTS.	APPLICANTS				WORK-RELIEF			Number of Days' Work at 80 Cents per Day	Value of Work- Relief
	Native Born	Foreign Born	Birth- place not Given	Totals	Number Supplied	Number not Supplied	Totals		
<i>Ward 12 — Con.</i>									
Precinct 4, . .	24	45	23	92	72	20	92	759	\$607.20
Precinct 5, . .	7	18	5	25	18	7	25	186	148.80
<i>Ward 13.</i>	183	228	57	418	325	93	418	3,783	\$3,026.40
Precinct 1, . .	34	40	13	87	65	22	87	699	559.20
Precinct 2, . .	24	47	9	80	61	19	80	702	561.60
Precinct 3, . .	13	38	7	58	42	16	58	546	436.80
Precinct 4, . .	21	22	8	51	40	11	51	402	321.60
Precinct 5, . .	12	14	3	29	26	3	29	339	271.20
Precinct 6, . .	5	15	3	23	14	9	23	174	139.20
Precinct 7, . .	8	19	6	33	27	6	33	309	247.20
Precinct 8, . .	5	9	2	16	14	2	16	144	115.20
Precinct 9, . .	11	24	6	41	36	5	41	468	374.40
<i>Ward 14.</i>	73	58	32	163	142	21	163	1,590	\$1,272.00
Precinct 1, . .	11	7	1	19	16	3	19	192	153.60
Precinct 2, . .	21	16	2	39	34	5	39	369	295.20
Precinct 3, . .	14	12	10	36	31	5	36	393	314.40
Precinct 4, . .	4	7	3	14	11	3	14	144	115.20
Precinct 5, . .	1	2	3	6	6	-	6	42	33.60
Precinct 6, . .	2	5	3	10	9	1	10	102	81.60
Precinct 7, . .	4	1	1	6	6	-	6	39	31.20
Precinct 8, . .	2	2	1	5	5	-	5	69	55.20
Precinct 9, . .	5	4	2	11	10	1	11	129	103.20
Precinct 10, . .	2	-	-	2	2	-	2	21	16.80
Precinct 11, . .	4	-	3	7	5	2	7	39	31.20
Precinct 12, . .	3	2	3	8	7	1	8	51	40.80
<i>Ward 15.</i>	42	79	24	145	126	19	145	1,539	\$1,231.20
Precinct 1, . .	10	33	7	50	44	6	50	513	410.40
Precinct 2, . .	6	6	2	14	14	-	14	174	139.20
Precinct 3, . .	4	2	-	6	4	2	6	36	28.80
Precinct 4, . .	2	5	-	7	5	2	7	72	57.60
Precinct 5, . .	2	3	1	6	5	1	6	81	64.80
Precinct 6, . .	6	15	3	29	24	5	29	276	220.80
Precinct 7, . .	7	12	2	21	19	2	21	276	220.80
Precinct 8, . .	5	3	4	12	11	1	12	111	88.80
<i>Ward 16.</i>	68	207	61	336	261	75	336	2,934	\$2,347.20
Precinct 1, . .	8	30	7	45	38	7	45	495	396.00
Precinct 2, . .	18	22	10	50	36	14	50	306	244.80
Precinct 3, . .	4	11	9	24	19	5	24	159	127.20
Precinct 4, . .	4	14	5	23	20	3	23	231	184.80
Precinct 5, . .	21	74	15	110	86	24	110	1,011	808.80
Precinct 6, . .	13	56	15	84	62	22	84	732	585.60
<i>Ward 17.</i>	53	65	29	147	100	47	147	975	\$780.00
Precinct 1, . .	2	4	2	8	6	2	8	39	31.20
Precinct 2, . .	1	1	-	2	1	1	2	3	2.40

WARDS AND PRECINCTS.	APPLICANTS				WORK-RELIEF			Number of Days' Work at 80 Cents per Day	Value of Work- Relief
	Native Born	Foreign Born	Birth- place not Given	Totals	Number Supplied	Number not Supplied	Totals		
<i>Ward 17 — Con.</i>									
Precinct 3, . .	2	4	3	9	7	2	9	39	\$31.20
Precinct 4, . .	2	2	2	6	5	1	6	42	33.60
Precinct 5, . .	5	6	1	12	6	6	12	78	62.40
Precinct 6, . .	14	21	9	44	31	13	44	291	232.80
Precinct 7, . .	14	17	6	37	21	16	37	213	170.40
Precinct 8, . .	13	10	6	29	23	6	29	270	216.00
<i>Ward 18.</i>	25	35	10	70	55	15	70	648	\$518.40
Precinct 1, . .	-	1	1	2	2	-	2	30	24.00
Precinct 2, . .	1	1	-	2	-	2	2	-	-
Precinct 3, . .	1	2	-	3	2	1	3	15	12.00
Precinct 4, . .	3	4	1	8	6	2	8	39	31.20
Precinct 5, . .	5	5	2	12	10	2	12	111	88.80
Precinct 6, . .	10	13	4	27	20	6	26	318	254.40
Precinct 7, . .	5	4	2	11	9	2	11	135	108.00
<i>Ward 19.</i>	55	59	23	137	101	36	137	1,110	\$888.00
Precinct 1, . .	13	6	3	22	15	7	22	186	148.80
Precinct 2, . .	2	15	3	20	15	5	20	162	129.60
Precinct 3, . .	9	16	6	31	23	8	31	297	237.60
Precinct 4, . .	5	3	1	9	4	5	9	39	31.20
Precinct 5, . .	5	4	2	11	9	2	11	60	48.00
Precinct 6, . .	4	2	3	9	7	2	9	42	33.60
Precinct 7, . .	10	6	2	18	10	8	18	147	117.60
Precinct 8, . .	5	2	1	8	7	1	8	99	79.20
Precinct 9, . .	2	5	2	9	6	3	9	78	62.40
<i>Ward 20.</i>	42	41	18	101	79	22	101	813	\$650.40
Precinct 1, . .	13	14	3	30	22	8	30	246	196.80
Precinct 2, . .	6	10	1	17	13	4	17	132	105.60
Precinct 3, . .	5	2	3	10	8	2	10	72	57.60
Precinct 4, . .	1	2	2	5	5	-	5	39	31.20
Precinct 5, . .	2	4	1	7	7	-	7	66	52.80
Precinct 6, . .	6	4	2	12	8	4	12	106	84.00
Precinct 7, . .	1	-	1	2	2	-	2	24	19.20
Precinct 8, . .	6	1	1	8	8	-	8	81	64.80
Precinct 9, . .	1	4	-	5	3	2	5	39	31.20
Precinct 10, . .	1	-	1	2	2	-	2	6	4.80
Precinct 12, . .	-	-	2	2	1	1	2	3	2.40
Precinct 13, . .	-	-	1	1	-	1	1	-	-
<i>Ward 21.</i>	8	12	6	26	18	8	26	177	\$141.60
Precinct 1, . .	-	2	1	3	2	1	3	12	9.60
Precinct 2, . .	1	1	1	3	3	-	3	33	26.40
Precinct 3, . .	-	1	-	1	1	-	1	12	9.60
Precinct 4, . .	-	5	1	6	5	1	6	36	28.80
Precinct 5, . .	6	2	1	9	5	4	9	78	62.40
Precinct 6, . .	-	1	-	1	-	1	1	-	-

WARDS AND PRECINCTS.	APPLICANTS				WORK-RELIEF			Number of Days' Work at 80 Cents per Day	Value of Work- Relief
	Native Born	Foreign Born	Birth- place not Given	Totals	Number Supplied	Number not Supplied	Totals		
<i>Ward 21 — Con.</i>									
Precinct 10, . .	1	-	-	1	1	-	1	3	\$2.40
Precinct 11, . .	-	-	1	1	-	1	1	-	-
Precinct 12, . .	-	-	1	1	1	-	1	3	2.40
<i>Ward 22.</i>	17	36	4	57	45	12	57	543	\$434.40
Precinct 1, . .	2	1	-	3	3	-	3	24	19.20
Precinct 2, . .	2	3	-	5	3	2	5	51	40.80
Precinct 3, . .	4	8	1	13	9	4	13	141	112.80
Precinct 4, . .	2	6	-	8	7	1	8	93	74.40
Precinct 5, . .	2	6	-	8	7	1	8	72	57.60
Precinct 6, . .	1	4	-	5	5	-	5	33	26.40
Precinct 7, . .	2	5	1	8	7	1	8	99	79.20
Precinct 9, . .	-	3	2	5	3	2	5	21	16.80
Precinct 10, . .	2	-	-	2	1	1	2	9	7.20
<i>Ward 23.</i>	15	25	9	49	40	9	49	375	\$300.00
Precinct 1, . .	1	2	2	5	4	1	5	21	16.80
Precinct 2, . .	1	1	-	2	2	-	2	33	26.40
Precinct 3, . .	2	1	2	5	4	1	5	27	21.60
Precinct 5, . .	1	-	-	1	1	-	1	9	7.20
Precinct 6, . .	-	-	1	1	-	1	1	-	-
Precinct 7, . .	2	2	-	4	4	-	4	54	43.20
Precinct 8, . .	1	13	4	18	15	3	18	129	103.20
Precinct 10, . .	5	4	-	9	6	3	9	66	52.80
Precinct 12, . .	1	1	-	2	2	-	2	12	9.60
Precinct 13, . .	-	1	-	1	1	-	1	3	2.40
Precinct 14, . .	1	-	-	1	1	-	1	21	16.80
<i>Ward 24.</i>	7	10	8	25	18	7	25	195	\$156.00
Precinct 1, . .	1	1	-	2	1	1	2	6	4.80
Precinct 2, . .	-	1	-	1	1	-	1	15	12.00
Precinct 3, . .	-	1	1	2	-	2	2	-	-
Precinct 4, . .	3	3	1	7	7	-	7	81	64.80
Precinct 5, . .	-	1	2	3	1	2	3	3	2.40
Precinct 6, . .	-	2	-	2	2	-	2	30	24.00
Precinct 7, . .	-	-	1	1	1	-	1	3	2.40
Precinct 8, . .	1	-	-	1	1	-	1	21	16.80
Precinct 10, . .	-	-	1	1	1	-	1	15	12.00
Precinct 13, . .	1	-	1	2	2	-	2	12	9.60
Precinct 15, . .	-	-	1	1	1	-	1	9	7.20
Precinct 16, . .	1	1	-	2	-	2	2	-	-
<i>Ward 25.</i>	1	2	1	4	3	1	4	27	\$21.00
Precinct 1, . .	-	1	-	1	1	-	1	6	4.80
Precinct 3, . .	1	-	-	1	1	-	1	18	14.40
Precinct 4, . .	-	1	1	2	1	1	2	3	2.40

## RECAPITULATION.

THE CITY, AND WARDS.	APPLICANTS				WORK-RELIEF			Number of Days' Work at 80 Cents per Day	Value of Work- Relief
	Native Born	Foreign Born	Birth- place not Given	Totals	Number Supplied	Number not Supplied	Totals		
THE CITY OF BOSTON.	900	2,028	597	3,525	2,728	797	3,525	30,060	\$24,048.00
Ward 1, . .	21	19	8	48	36	12	48	369	295.20
Ward 2, . .	14	50	11	75	62	13	75	711	568.80
Ward 3, . .	17	31	8	51	40	11	51	477	381.60
Ward 4, . .	21	16	16	53	37	16	53	486	388.80
Ward 5, . .	13	35	7	55	45	10	55	444	355.20
Ward 6, . .	42	222	31	295	231	64	295	2,610	2,068.00
Ward 7, . .	24	231	32	287	221	66	287	2,320	1,776.00
Ward 8, . .	48	293	50	391	317	74	391	3,322	2,657.60
Ward 9, . .	40	33	19	97	75	22	97	789	631.20
Ward 10, . .	13	18	19	50	28	22	50	294	235.20
Ward 11, . .	26	36	24	86	62	24	86	606	484.80
Ward 12, . .	82	176	64	322	240	82	322	2,430	1,944.00
Ward 13, . .	133	223	57	418	325	93	418	3,783	3,026.40
Ward 14, . .	73	58	32	163	142	21	163	1,500	1,272.00
Ward 15, . .	42	79	24	145	126	19	145	1,539	1,231.20
Ward 16, . .	68	207	61	336	261	75	336	2,934	2,347.20
Ward 17, . .	53	65	29	147	100	47	147	975	780.00
Ward 18, . .	25	35	10	70	55	15	70	648	518.40
Ward 19, . .	55	59	23	137	101	36	137	1,110	888.00
Ward 20, . .	42	41	18	101	79	22	101	813	650.40
Ward 21, . .	8	12	6	26	18	8	26	177	141.60
Ward 22, . .	17	36	4	57	45	12	57	543	434.40
Ward 23, . .	15	25	9	49	40	9	49	375	300.00
Ward 24, . .	7	10	8	25	18	7	25	195	156.00
Ward 25, . .	1	2	1	4	3	1	4	27	21.60
Ward not specified,	-	6	31	37	21	16	37	93	74.40

Referring to the recapitulation at the close of the table, it will be seen that the total number of applicants was 3,525, of whom 2,728 were supplied with work-relief, and 797 not supplied. As to nativities, 2,028 were foreign born and 900 native born, 597 being returned under the head of "birthplace not given." To these applicants, work, amounting in the aggregate to 30,060 days at 80 cents per day was furnished, the total amount of money disbursed in wages being \$24,048. The main table shows the facts as classified for each precinct in the city, with totals for the wards, these ward totals being brought forward into the recapitulation.

Scanning the ward totals only, we find the greatest number of applicants in any single ward, namely, 418, in ward 13. Of these, 325 were supplied with work covering in the

aggregate 3,783 days, the amount of wages paid being \$3,026.40. A slightly larger sum in wages was disbursed in ward 8, the amount being \$3,057.60, paid to 317 persons for 3,822 days' work, the total number of applicants in this ward being 391.

Other wards in which a comparatively large number of applicants appeared and a correspondingly large number was supplied with work, are ward 6, the number supplied with work being 231, to whom the sum of \$2,088 was paid; ward 7, number supplied with work 221, amount of wages paid \$1,776; ward 12, number supplied with work 240, amount of wages paid \$1,944; ward 14, number supplied with work 142, amount of wages paid \$1,272; ward 15, number supplied with work 126, amount of wages paid \$1,231.20; and ward 16, number supplied with work 261, amount of wages paid \$2,347.20.

In order to show the facts for the so-called concentrated district, the following analysis table is introduced, in which the figures for the wards and precincts comprising this district are brought forward:

THE CONCENTRATED DISTRICT.	APPLICANTS				WORK-RELIEF			Number of Days' Work at 80 Cents per Day	Value of Work-Relief
	Native Born	Foreign Born	Birth-place not Given	Totals	Number Supplied	Number not Supplied	Totals		
Ward 6, . . .	42	222	31	295	231	64	295	2,610	\$2,088.00
Ward 7, . . .	24	231	32	287	221	66	287	2,220	1,776.00
Ward 11(Precinct 5),	11	17	10	38	26	12	38	267	213.00
Ward 12 (Precincts 1 and 2), . . .	30	65	15	110	80	30	110	816	652.80
Ward 13 (Precincts 1, 2, 3, and 5), .	83	139	32	254	194	60	254	2,286	1,828.80
Ward 16 (Precincts 1, 2, 3, and 6), .	43	119	41	203	155	48	203	1,692	1,353.60
Ward 19 (Precincts 2, 3, 4 and 6), .	20	36	13	69	54	15	69	540	432.00
TOTALS, . . .	253	829	174	1,256	961	295	1,256	10,431	\$8,344.80

From the above table it will be seen that the total number of applicants from the concentrated district was 1,256, or 35.63 per cent of the total number of applicants from the city at large. Of these, 961 were supplied with work. This number constitutes 35.23 per cent of the total number supplied with work from the city at large. The number of days' work sup-

plied at 80 cents per day was 10,431, or 34.70 per cent of the total number of days' work supplied; and the total amount paid in wages to applicants from the concentrated district was \$8,344.80, or 34.70 per cent of the total amount paid in wages to all applicants. These items, relative to the concentrated district, may be compared with similar items respecting the applicants for work at the Court House on page 144.

The next table presents the facts as to ages.

WARDS.	AGE PERIODS								Age Un-known	ALL AGES
	14 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 and over		
Ward 1, . . .	8	16	11	9	2	1	-	-	1	48
Ward 2, . . .	15	22	18	16	2	-	-	-	2	75
Ward 3, . . .	8	14	14	6	8	-	-	-	1	51
Ward 4, . . .	14	19	6	9	2	1	-	-	2	53
Ward 5, . . .	6	15	10	15	3	3	-	-	3	55
Ward 6, . . .	88	86	50	34	23	7	1	-	6	295
Ward 7, . . .	112	72	46	39	8	3	-	-	7	287
Ward 8, . . .	121	137	52	45	20	7	-	-	9	391
Ward 9, . . .	8	27	31	19	5	5	-	-	2	97
Ward 10, . . .	7	15	12	7	3	2	1	-	3	50
Ward 11, . . .	13	19	22	18	9	1	-	-	4	86
Ward 12, . . .	30	74	92	60	33	22	2	1	8	322
Ward 13, . . .	84	117	97	64	30	14	-	-	12	418
Ward 14, . . .	37	46	32	25	14	5	1	-	3	163
Ward 15, . . .	33	31	37	25	11	6	-	-	2	145
Ward 16, . . .	58	96	68	61	28	9	3	-	13	336
Ward 17, . . .	31	35	25	20	22	7	1	-	6	147
Ward 18, . . .	6	20	12	19	10	1	-	-	2	70
Ward 19, . . .	24	38	35	20	13	6	-	-	1	187
Ward 20, . . .	23	33	23	13	6	-	2	-	1	101
Ward 21, . . .	4	9	6	2	3	-	-	-	2	26
Ward 22, . . .	8	9	37	7	5	-	-	-	1	57
Ward 23, . . .	12	10	9	13	1	1	-	-	3	49
Ward 24, . . .	7	7	1	3	3	2	-	-	2	25
Ward 25, . . .	1	2	-	-	-	1	-	-	-	4
Ward not specified,	5	12	6	2	2	1	-	-	9	37
TOTALS, . . .	763	981	742	551	266	105	11	1	105	3,525

The final line of the table shows that 763 applicants were found in the age period 14 to 19, 981 in the period 20 to 29, 742 in the period 30 to 39, 551 in the period 40 to 49, 266 in the period 50 to 59, 105 in the period 60 to 69, while only 11 persons were classed in the period 70 to 79, and but one of the applicants had passed the age of 80 years. The number of applicants whose age was unknown was 105. As was found to



be the case with respect to the men who applied for work at the Court House, the applicants among the women were mainly in the prime of life, 2,486 being under 40 years of age. A much larger number were under the age of 20 years than was the case among the men. This is undoubtedly due to the fact that

	OCCUPATIONS.	AGE PERIODS					
		UNDER 21			21 BUT UNDER 45		
		Native Born	Foreign Born	Birth-place not Given	Native Born	Foreign Born	Birth-place not Given
1	Coat makers, . . . . .	1	15	-	1	6	-
2	Cooks, . . . . .	-	-	-	9	29	9
3	Dressmakers, . . . . .	9	23	7	20	34	10
4	Employés:						
5	Candy factory, . . . . .	16	14	6	3	3	-
6	Cordage factory, . . . . .	20	10	2	11	2	1
7	Restaurant, . . . . .	-	2	-	13	19	11
8	Rope factory, . . . . .	2	3	-	4	1	-
9	Tailor shop, . . . . .	1	26	6	2	37	3
10	Housewives, . . . . .	3	6	-	50	224	19
11	Housework, . . . . .	31	24	22	83	225	87
12	Laundry work, . . . . .	2	3	1	37	96	25
13	Pantaloons makers, . . . . .	2	16	1	1	18	2
14	Personal service (house cleaning, etc.), . . . . .	1	1	-	16	30	3
15	Seamstresses, . . . . .	10	21	9	42	52	26
16	Shirt makers, . . . . .	-	9	7	4	3	1
17	Spinners, . . . . .	2	-	-	1	12	-
18	Tailoresses, . . . . .	15	143	8	27	91	16
19	Wrapper makers, . . . . .	-	19	3	-	7	-
20	Not given, . . . . .	7	14	9	16	20	10
21	Other occupations, . . . . .	186	143	41	163	185	54
22	TOTALS, . . . . .	308	492	122	502	1,094	277

In the table, the applicants are classified under certain occupation heads, and are also classified with respect to native and foreign born, and by age periods. The final line of the table shows that of the applicants under 21 years of age, in all occupations, 492 were foreign born, and 308 native born, while 122 were returned under the head "birthplace not given." Of the applicants 21 years of age but under 45, 1,094 were foreign born, 502 native born, and 277 classified under "birthplace not given." Of those who were 45 years of age but under 60, 342 were foreign born, 75 native born, and 96 classed under "birthplace not given." Under the occupations specified, the

the occupations represented among the women, as will be seen hereinafter, were such as included young and untrained persons to a much greater extent than among the men.

The next table presents for the city at large the facts relative to occupations.

AGE PERIODS												
45 BUT UNDER 60			60 AND OVER			AGE UNKNOWN			TOTALS			
Na-tive Born	Foreign Born	Birth-place not Given	Na-tive Born	Foreign Born	Birth-place not Given	Na-tive Born	Foreign Born	Birth-place not Given	Na-tive Born	Foreign Born	Birth-place not Given	
-	1	1	-	-	-	-	-	-	2	22	1	1
3	21	11	-	5	1	-	-	-	12	55	21	2
4	11	3	1	1	-	-	-	1	34	69	20	3
-	-	-	-	-	-	-	-	-	-	-	-	4
-	-	-	-	-	-	-	-	-	19	17	6	5
-	-	-	-	-	-	-	-	-	31	12	3	6
-	6	-	-	-	-	-	-	-	13	27	11	7
-	-	-	-	-	-	-	-	-	6	4	-	8
-	6	1	-	1	-	-	-	-	3	70	10	9
7	31	4	1	6	1	-	3	-	61	270	24	10
10	65	26	3	15	5	2	2	1	123	331	141	11
8	54	15	-	13	3	-	1	1	47	167	45	12
1	2	1	-	1	1	-	-	-	4	37	5	13
-	-	-	-	-	-	-	-	-	-	-	-	-
2	14	4	-	5	-	-	1	2	19	51	9	14
12	18	7	3	6	3	-	1	2	67	98	47	15
-	1	-	-	-	-	-	-	-	4	13	3	16
-	1	-	-	-	-	-	-	-	3	13	-	17
5	13	2	1	5	-	-	1	2	48	253	28	18
-	-	-	-	-	-	-	-	-	-	26	3	19
3	10	2	-	5	3	1	6	72	26	55	96	20
20	88	20	4	19	2	-	3	2	373	438	119	21
75	342	96	12	82	19	3	18	83	900	2,028	597	22

largest aggregation of numbers appears under the head of housework. In this class, there were 331 applicants of foreign birth, 128 of native birth, and 141 whose birthplace was not given. The housewives are also quite numerous, 270 foreign born persons of this occupation appearing, with 61 native born, and 24 "birthplace not given." Tailoresses also comprise a considerable number of the applicants, there being 253 foreign born, 48 native born, and 28 "birthplace not given."

Besides the special occupations classified, there were 438 foreign born applicants, 373 native born, and 119 whose birthplace was not given who were included under the head "other

occupations," including a great variety of occupations, under each of which comparatively few persons were found.

The following analysis table condenses the figures as to occupations, eliminating the classification as to place of birth:

OCCUPATIONS.	AGE PERIODS				Age Unknown	ALL AGES
	Under 21	21 but under 45	45 but under 60	60 and over		
Coat makers, . . . . .	16	7	2	-	-	25
Cooks, . . . . .	-	47	35	6	-	88
Dressmakers, . . . . .	39	64	17	2	1	123
Employés:						
Candy factory, . . . . .	36	6	-	-	-	42
Cordage factory, . . . . .	32	14	-	-	-	46
Restaurant, . . . . .	2	43	6	-	-	51
Rope factory, . . . . .	5	5	-	-	-	10
Tailor shop, . . . . .	33	42	7	1	-	83
Housewives, . . . . .	9	298	42	8	3	358
Housework, . . . . .	77	395	101	22	5	600
Laundry work, . . . . .	6	158	77	16	2	259
Pantaloon makers, . . . . .	19	21	4	2	-	46
Personal service (house cleaning, etc.), . . . . .	2	49	20	5	3	79
Seamstresses, . . . . .	40	120	37	12	3	212
Shirt makers, . . . . .	16	8	1	-	-	25
Spinners, . . . . .	2	13	1	-	-	16
Tailoresses, . . . . .	166	134	20	6	3	329
Wrapper makers, . . . . .	22	7	-	-	-	29
Not given, . . . . .	30	45	15	8	79	177
Other occupations, . . . . .	370	402	128	25	5	930
TOTALS, . . . . .	922	1,873	513	113	104	3,525

The final column in this table presents the total number of applicants of all ages, under each of the occupation heads, whereby it is distinctly seen that of all the applicants, 600 were engaged in housework, 355 were housewives, 329 tailoresses, 259 engaged in laundry work, 212 were seamstresses, 123 dressmakers, the number under each of the other occupation heads being less than 100, while for 177 applicants the occupation was not given, and 930 applicants were engaged in a variety of occupations not specially classified in the table.

A consolidation of the figures showing the distribution of occupations as to ages indicates the largest proportion of young persons in the mechanical industries, including under that head the coat makers, dressmakers, and other workers upon clothing,

including seamstresses, the employés in factories of various kinds and the spinners. Of these, 426 were under 21 years of age, while 441 were 21 but under 45, only 112 being above the age of 45. Of the persons engaged in domestic and personal service, however, including under that head the cooks, housewives, persons occupied with housework, laundry work, or personal service, only 96 were under 21 years of age, while 985 were 21 but under 45, and 338 were above the age of 45.

An examination of the occupation heads, as classified in the tables, will show that, as was the case with the men who applied for work at the Court House, a large number of the applicants were either untrained in any special occupation, for instance, were engaged in housework or domestic service, such as laundry work, personal service, (house-cleaning, etc.); or were persons engaged in occupations requiring a very limited degree of skill, such as employés in the manufacture of clothing, classed as tailoresses in the table, seamstresses, etc. It was also found that where the occupation returned by the applicant indicated a certain amount of training, to one unacquainted with the circumstances surrounding the industry, for instance, operatives in certain factory industries, such as cordage factory operatives, candy factory operatives, etc., it was nevertheless true that the work performed by these operatives required a very low degree of skill; so that, in general, it may be stated, as was undoubtedly the fact with reference to the men, plainly brought out in the statistics of occupations which we have presented, that by far the larger part of the applicants among the women were possessed of a very limited degree of industrial skill.

The next table shows the occupations of applicants when given, classified under the following heads: Shop work, home work, and domestic and personal service. Under these heads it presents the amount of average weekly earnings of the applicant prior to receiving aid, the total amount of work-relief for native born and foreign born applicants, respectively, and the same items for those whose birthplace is not given, together with aggregates.

	WARDS AND CLASSIFICATION.	NATIVE BORN				FOREIGN BORN	
		WEEKLY EARNINGS		VALUE OF WORK-RELIEF		WEEKLY EARNINGS	
		Number Re- porting	Aver- age	Num- ber Sup- plied	Aver- age	Number Re- porting	Aver- age
1	Ward 1.	16	\$3.66	14	\$10.46	12	\$5.12
2	Shop work, . . . . .	7	4.00	5	11.52	6	6.67
3	Home work, . . . . .	5	4.10	6	9.20	1	1.50
4	Domestic and personal service, . .	4	2.50	3	11.20	5	3.98
5	Not given, . . . . .	-	-	-	-	-	-
6	Ward 2.	12	4.29	13	9.42	33	4.32
7	Shop work, . . . . .	11	4.41	11	9.16	15	5.20
8	Home work, . . . . .	-	-	1	19.20	6	2.50
9	Domestic and personal service, . .	1	3.00	1	2.40	12	4.13
10	Not given, . . . . .	-	-	-	-	-	-
11	Ward 3.	11	3.66	13	10.89	20	3.80
12	Shop work, . . . . .	9	3.97	7	11.66	6	4.50
13	Home work, . . . . .	-	-	2	7.20	3	5.33
14	Domestic and personal service, . .	2	2.25	4	11.40	10	3.00
15	Not given, . . . . .	-	-	-	-	1	3.00
16	Ward 4.	16	4.74	19	12.00	10	4.52
17	Shop work, . . . . .	11	4.76	12	13.00	5	4.73
18	Home work, . . . . .	2	5.00	4	13.20	-	-
19	Domestic and personal service, . .	3	4.50	3	6.40	5	4.30
20	Not given, . . . . .	-	-	-	-	-	-
21	Ward 5.	9	3.67	10	7.68	20	4.25
22	Shop work, . . . . .	5	4.10	5	9.12	6	5.17
23	Home work, . . . . .	1	2.50	2	7.20	4	3.63
24	Domestic and personal service, . .	2	3.75	2	7.20	10	3.95
25	Not given, . . . . .	1	2.50	1	2.40	-	-
26	Ward 6.	32	4.39	39	8.98	160	3.97
27	Shop work, . . . . .	27	4.46	27	8.71	106	4.40
28	Home work, . . . . .	-	-	3	10.40	17	2.96
29	Domestic and personal service, . .	5	4.00	7	9.60	21	2.86
30	Not given, . . . . .	-	-	2	8.40	16	3.64
31	Ward 7.	19	4.21	20	8.64	158	4.15
32	Shop work, . . . . .	11	4.77	9	10.40	95	4.36
33	Home work, . . . . .	3	2.92	6	8.00	9	4.14
34	Domestic and personal service, . .	5	3.75	4	7.20	27	3.50
35	Not given, . . . . .	-	-	1	2.40	27	4.07
36	Ward 8.	36	4.20	35	10.42	191	4.60
37	Shop work, . . . . .	18	4.61	14	13.03	146	4.69
38	Home work, . . . . .	2	4.63	7	12.69	14	4.36
39	Domestic and personal service, . .	16	3.69	14	6.69	31	4.27
40	Not given, . . . . .	-	-	-	-	-	-
41	Ward 9.	26	4.44	32	9.00	25	4.64
42	Shop work, . . . . .	8	4.81	10	8.40	11	4.73
43	Home work, . . . . .	-	-	3	10.40	-	-

FOREIGN BORN		BIRTHPLACE NOT GIVEN				AGGREGATES					
VALUE OF WORK-RELIEF		WEEKLY EARNINGS		VALUE OF WORK-RELIEF		WEEKLY EARNINGS		VALUE OF WORK-RELIEF			
Number Supplied	Average	Number Reporting	Average	Number Supplied	Average	Number Reporting	Average	Number Supplied	Average		
15	\$7.52	5	\$4.20	7	\$5.14	33	\$4.27	36	\$8.20	1	
7	6.51	4	4.50	3	7.20	17	5.06	15	8.32	2	
3	12.00	-	-	2	3.60	6	3.67	11	8.95	3	
5	6.24	1	3.00	1	4.80	10	3.29	9	7.73	4	
-	-	-	-	1	2.40	-	-	1	2.40	5	
41	9.66	4	3.52	8	6.30	49	4.25	62	9.17	6	
16	10.20	2	3.07	3	3.20	28	4.74	30	9.12	7	
14	9.43	-	-	1	14.40	6	2.50	16	10.35	8	
11	9.16	2	3.98	2	10.80	15	4.03	14	8.91	9	
-	-	-	-	2	2.40	-	-	2	2.40	10	
25	8.93	1	3.00	2	8.40	32	3.73	40	9.54	11	
6	9.20	-	-	-	-	15	4.18	18	10.52	12	
10	8.40	1	3.00	2	8.40	4	4.75	14	8.23	13	
8	9.60	-	-	-	-	12	2.88	12	10.20	14	
1	7.20	-	-	-	-	1	3.00	1	7.20	15	
11	10.25	8	3.50	7	6.86	34	4.38	37	10.51	16	
5	8.16	1	5.00	1	4.80	17	4.77	18	11.20	17	
3	16.00	-	-	1	14.40	2	5.00	8	14.40	18	
3	8.00	7	3.29	4	6.60	15	3.87	10	6.96	19	
-	-	-	-	1	2.40	-	-	1	2.40	20	
31	7.59	2	5.60	4	10.80	31	4.17	45	7.89	21	
7	6.17	2	5.60	1	16.80	13	4.82	13	8.12	22	
11	10.47	-	-	-	-	5	3.40	13	9.97	23	
12	6.20	-	-	1	19.20	12	3.92	15	7.20	24	
1	2.40	-	-	2	3.60	1	2.50	4	3.00	25	
171	9.29	19	3.76	21	7.09	211	4.01	231	9.04	26	
98	9.80	10	4.48	6	5.20	143	4.42	131	9.36	27	
32	9.90	3	2.00	4	13.20	20	2.81	39	10.28	28	
20	6.84	4	3.81	5	7.20	30	3.18	32	7.50	29	
21	8.34	2	2.75	6	4.80	18	3.54	29	7.61	30	
179	8.50	15	4.07	23	3.71	192	4.15	221	8.04	31	
72	8.30	6	4.58	7	4.46	112	4.42	88	8.21	32	
42	9.49	-	-	-	-	12	3.83	48	9.30	33	
30	7.44	4	2.25	7	3.09	36	3.40	41	6.67	34	
35	8.64	5	4.90	8	3.60	32	4.20	44	7.58	35	
249	10.10	14	5.75	33	5.38	241	4.60	317	9.65	36	
133	10.33	12	5.83	15	7.04	176	4.76	167	10.26	37	
66	10.87	-	-	2	9.60	16	4.39	75	11.01	38	
40	8.88	2	5.25	6	4.40	49	4.12	60	7.92	39	
5	3.36	-	-	10	2.64	-	-	15	2.88	40	
32	8.48	5	4.40	11	6.55	56	4.53	75	8.42	41	
11	9.16	1	10.00	2	6.00	20	5.08	23	8.56	42	
6	6.80	2	2.38	4	12.00	2	2.38	13	9.23	43	

	WARDS AND CLASSIFICATION.	NATIVE BORN				FOREIGN BORN	
		WEEKLY EARNINGS		VALUE OF WORK-RELIEF		WEEKLY EARNINGS	
		Number Re- porting	Aver- age	Num- ber Sup- plied	Aver- age	Number Re- porting	Aver- age
	<i>Ward 9 — Con.</i>						
1	Domestic and personal service, . . .	17	\$4.09	18	\$9.47	14	\$4.57
2	Not given, . . . . .	1	7.50	1	2.40	-	-
3	<i>Ward 10.</i>	11	4.36	8	12.00	14	4.57
4	Shop work, . . . . .	6	5.08	4	12.60	5	5.60
5	Home work, . . . . .	1	3.00	1	12.00	1	1.50
6	Domestic and personal service, . . .	3	3.67	2	15.60	5	4.20
7	Not given, . . . . .	1	3.50	1	2.40	3	4.50
8	<i>Ward 11.</i>	14	4.36	21	8.23	24	4.23
9	Shop work, . . . . .	4	4.38	5	6.24	1	5.00
10	Home work, . . . . .	-	-	-	-	1	6.00
11	Domestic and personal service, . . .	9	3.94	10	11.04	19	3.99
12	Not given, . . . . .	1	8.00	6	5.20	3	5.33
13	<i>Ward 12.</i>	57	4.18	66	8.25	103	3.60
14	Shop work, . . . . .	32	4.21	33	8.44	32	5.36
15	Home work, . . . . .	3	5.67	9	8.80	10	3.88
16	Domestic and personal service, . . .	22	3.94	20	7.92	61	4.26
17	Not given, . . . . .	-	-	4	7.20	-	-
18	<i>Ward 13.</i>	96	4.06	116	9.14	109	4.30
19	Shop work, . . . . .	72	4.31	70	9.43	32	4.48
20	Home work, . . . . .	2	5.50	22	10.80	7	4.18
21	Domestic and personal service, . . .	19	3.11	18	6.13	63	4.23
22	Not given, . . . . .	3	3.17	6	8.80	7	4.30
23	<i>Ward 14.</i>	47	4.34	63	9.26	31	3.96
24	Shop work, . . . . .	29	4.66	32	10.20	15	4.43
25	Home work, . . . . .	3	2.67	9	10.40	2	3.25
26	Domestic and personal service, . . .	8	3.56	12	7.00	10	3.45
27	Not given, . . . . .	7	4.61	10	7.92	4	3.63
28	<i>Ward 15.</i>	31	4.62	37	10.12	42	3.86
29	Shop work, . . . . .	19	4.93	20	11.04	15	5.21
30	Home work, . . . . .	-	-	4	8.40	3	2.83
31	Domestic and personal service, . . .	8	3.89	5	8.64	17	2.82
32	Not given, . . . . .	4	4.63	8	9.60	7	3.91
33	<i>Ward 16.</i>	42	4.10	60	9.44	109	4.35
34	Shop work, . . . . .	17	4.93	18	11.33	70	4.88
35	Home work, . . . . .	7	3.64	17	10.02	4	2.94
36	Domestic and personal service, . . .	18	3.50	25	7.68	35	3.46
37	Not given, . . . . .	-	-	-	-	-	-
38	<i>Ward 17.</i>	38	4.28	35	8.98	36	4.26
39	Shop work, . . . . .	20	5.12	17	10.87	8	5.00
40	Home work, . . . . .	2	2.25	1	4.80	1	5.00
41	Domestic and personal service, . . .	16	3.50	14	8.06	22	3.56
42	Not given, . . . . .	-	-	3	4.00	5	6.00

FOREIGN BORN		BIRTHPLACE NOT GIVEN				AGGREGATES					
VALUE OF WORK-RELIEF		WEEKLY EARNINGS		VALUE OF WORK-RELIEF		WEEKLY EARNINGS		VALUE OF WORK-RELIEF			
Num- ber Sup- plied	Aver- age	Number Re- porting	Aver- age	Num- ber Sup- plied	Aver- age	Number Re- porting	Aver- age	Num- ber Sup- plied	Aver- age		
14	\$8.74	2	\$3.63	3	\$2.40	33	\$4.26	35	\$8.57	1	
1	7.20	-	-	2	2.40	1	7.50	4	3.00	2	
10	7.92	10	5.10	10	6.00	35	4.66	28	8.40	3	
3	16.00	3	9.67	2	9.60	14	6.25	9	13.07	4	
2	3.00	-	-	-	-	2	2.25	3	6.40	5	
3	5.60	5	2.30	3	4.00	13	3.54	3	7.50	6	
2	3.60	2	4.00	5	5.76	6	4.17	3	4.80	7	
24	8.20	13	4.40	17	6.78	51	4.33	62	7.32	8	
1	9.60	2	4.75	2	4.80	7	4.57	3	6.30	9	
3	9.00	1	2.50	2	10.80	2	4.25	5	10.08	10	
27	7.62	3	4.56	3	6.00	36	4.10	35	8.23	11	
3	9.60	2	4.33	5	7.20	6	5.44	14	6.86	12	
42	9.00	27	4.64	42	5.03	187	4.46	240	8.10	13	
32	9.68	12	5.61	12	5.00	76	4.91	77	8.42	14	
30	9.60	2	2.00	9	5.87	15	3.98	48	8.75	15	
68	8.38	13	4.15	14	5.49	96	4.17	102	7.88	16	
2	10.80	-	-	7	3.09	-	-	13	5.54	17	
176	9.95	25	3.34	33	6.47	230	4.10	325	9.31	18	
28	10.29	3	4.50	3	6.90	112	4.37	106	9.46	19	
70	9.70	2	1.75	4	12.00	11	3.98	96	10.05	20	
66	9.78	14	2.91	12	6.40	96	3.81	96	8.68	21	
12	11.60	1	3.20	9	3.73	11	3.89	27	8.36	22	
52	10.52	13	3.69	27	5.24	91	4.12	142	8.96	23	
15	10.72	5	3.60	6	5.20	49	4.48	53	9.78	24	
8	10.20	1	4.00	4	7.80	6	3.08	21	9.83	25	
14	9.94	4	2.38	7	4.46	22	3.30	33	7.71	26	
15	11.04	3	5.50	10	4.80	14	4.59	35	8.37	27	
67	10.07	14	4.31	22	3.29	87	4.20	126	9.77	28	
14	10.11	6	4.36	7	9.26	40	4.96	41	10.42	29	
16	11.70	-	-	3	3.00	3	2.83	23	10.64	30	
21	3.60	4	3.25	4	5.40	29	3.18	30	8.24	31	
16	10.20	4	5.30	3	9.00	15	4.47	32	9.75	32	
161	9.94	19	3.37	40	4.50	170	4.18	261	8.99	33	
60	10.82	5	4.70	9	4.00	92	4.88	96	10.28	34	
42	10.46	1	1.50	5	4.80	12	3.23	64	9.90	35	
49	3.42	13	3.01	20	5.16	66	3.38	94	7.53	36	
1	2.40	-	-	6	2.80	-	-	7	2.74	37	
45	3.16	11	4.18	20	4.92	35	4.26	100	7.80	38	
6	12.00	4	3.94	3	5.60	32	4.94	26	10.52	39	
4	10.20	-	-	1	2.40	3	3.17	6	8.00	40	
26	7.48	6	4.33	10	4.32	44	3.65	50	7.01	41	
9	6.67	1	4.00	6	6.00	6	5.67	18	6.00	42	



	WARDS AND CLASSIFICATION.	NATIVE BORN				FOREIGN BORN	
		WEEKLY EARNINGS		VALUE OF WORK-RELIEF		WEEKLY EARNINGS	
		Number Re- porting	Aver- age	Num- ber Sup- plied	Aver- age	Number Re- porting	Aver- age
1	Ward 18.	19	\$4.54	23	\$10.33	20	\$5.10
2	Shop work, . . . . .	9	5.03	9	10.67	8	5.63
3	Home work, . . . . .	-	-	2	8.40	-	-
4	Domestic and personal service, . .	5	3.70	5	7.68	8	4.50
5	Not given, . . . . .	5	4.50	7	12.34	4	5.25
6	Ward 19.	35	5.00	39	9.66	26	3.99
7	Shop work, . . . . .	22	5.50	17	10.45	7	4.29
8	Home work, . . . . .	-	-	5	12.48	1	6.00
9	Domestic and personal service, . .	10	3.42	11	9.82	14	3.70
10	Not given, . . . . .	3	6.58	6	4.80	4	3.99
11	Ward 20.	28	4.42	35	9.12	22	4.66
12	Shop work, . . . . .	19	5.20	18	10.27	12	5.17
13	Home work, . . . . .	-	-	5	11.04	2	3.75
14	Domestic and personal service, . .	6	1.96	5	7.68	8	4.13
15	Not given, . . . . .	3	4.42	7	5.83	-	-
16	Ward 21.	4	3.81	5	12.96	4	3.81
17	Shop work, . . . . .	3	4.58	3	12.80	2	3.68
18	Home work, . . . . .	-	-	-	-	1	3.50
19	Domestic and personal service, . .	1	1.50	1	24.00	1	2.00
20	Not given, . . . . .	-	-	1	2.40	-	-
21	Ward 22.	9	4.50	13	11.82	13	3.77
22	Shop work, . . . . .	4	4.75	3	12.00	4	3.38
23	Home work, . . . . .	-	-	3	14.40	1	10.00
24	Domestic and personal service, . .	5	4.30	6	11.20	7	2.79
25	Not given, . . . . .	-	-	1	7.20	1	6.00
26	Ward 23.	9	4.72	13	7.75	16	4.78
27	Shop work, . . . . .	5	4.60	6	4.00	15	4.99
28	Home work, . . . . .	1	7.00	2	12.00	-	-
29	Domestic and personal service, . .	3	4.17	4	9.60	1	1.63
30	Not given, . . . . .	-	-	1	14.40	-	-
31	Ward 24.	5	3.35	5	9.12	5	3.20
32	Shop work, . . . . .	2	2.75	1	16.80	1	5.00
33	Home work, . . . . .	-	-	-	-	1	1.75
34	Domestic and personal service, . .	2	3.88	1	2.40	1	4.00
35	Not given, . . . . .	1	3.50	3	8.80	2	2.63
36	Ward 25.	-	-	1	14.40	-	-
37	Shop work, . . . . .	-	-	-	-	-	-
38	Domestic and personal service, . .	-	-	1	14.40	-	-
39	Ward not Specified.	-	-	-	-	3	3.63
40	Shop work, . . . . .	-	-	-	-	-	-
41	Domestic and personal service, . .	-	-	-	-	2	3.25
42	Not given, . . . . .	-	-	-	-	1	5.00

FOREIGN BORN		BIRTHPLACE NOT GIVEN				AGGREGATES					
VALUE OF WORK-RELIEF		WEEKLY EARNINGS		VALUE OF WORK-RELIEF		WEEKLY EARNINGS		VALUE OF WORK-RELIEF			
Num- ber Sup- plied	Aver- age	Number Re- porting	Aver- age	Num- ber Sup- plied	Aver- age	Number Re- porting	Aver- age	Num- ber Sup- plied	Aver- age		
28	\$9.78	3	\$5.75	6	\$4.40	42	\$4.89	55	\$9.43	1	
8	8.40	1	5.00	1	4.80	18	5.29	18	9.33	2	
3	10.40	-	-	-	-	-	-	5	9.60	3	
7	6.51	2	6.13	3	4.00	15	4.45	15	6.40	4	
8	13.80	-	-	2	4.80	9	4.83	17	12.14	5	
43	9.10	10	5.80	14	5.31	71	4.74	101	8.79	6	
6	12.40	1	5.00	1	9.60	30	5.20	24	10.90	7	
11	8.95	-	-	1	7.20	1	6.00	17	9.88	8	
17	7.48	6	5.00	8	5.10	30	3.87	36	7.67	9	
14	9.77	3	7.67	4	4.20	10	5.87	24	7.60	10	
23	8.29	6	4.17	11	5.24	56	4.49	79	8.23	11	
12	6.40	1	3.00	1	7.20	32	5.12	31	8.67	12	
9	11.73	1	5.00	3	7.20	3	4.17	17	10.73	13	
11	7.85	3	4.17	4	4.20	17	3.37	20	7.08	14	
1	4.80	1	4.50	3	4.00	4	4.44	11	5.24	15	
8	8.10	1	5.50	5	2.40	9	3.78	18	7.87	16	
2	4.80	1	5.50	-	-	6	4.50	5	9.60	17	
2	8.40	-	-	2	2.40	1	3.50	4	5.40	18	
3	8.80	-	-	1	2.40	2	1.75	5	10.56	19	
1	12.00	-	-	2	2.40	-	-	4	4.80	20	
29	8.69	1	4.50	3	9.60	23	4.09	45	9.65	21	
3	8.80	1	4.50	1	4.80	9	4.11	7	9.60	22	
12	11.00	-	-	-	-	1	10.00	15	11.68	23	
10	6.96	-	-	1	14.40	12	3.42	17	8.89	24	
4	6.00	-	-	1	9.60	1	6.00	6	8.16	25	
21	8.57	4	5.88	6	3.20	20	4.91	40	7.50	26	
15	9.23	-	-	1	4.80	20	4.90	22	7.64	27	
2	7.20	2	5.25	1	2.40	3	5.83	5	8.16	28	
2	6.00	1	8.00	-	-	5	4.43	6	8.40	29	
2	7.20	1	5.00	4	3.00	1	5.00	7	5.83	30	
8	9.90	2	5.13	5	6.24	12	3.58	18	8.67	31	
1	14.40	1	6.00	1	2.40	4	4.13	3	11.20	32	
3	8.80	-	-	1	12.00	1	1.75	4	9.60	33	
1	2.40	-	-	2	4.80	3	3.92	4	3.66	34	
3	12.06	1	4.25	1	7.20	4	3.25	7	9.94	35	
2	3.60	1	3.50	-	-	1	3.50	3	7.20	36	
1	2.40	-	-	-	-	-	-	1	2.40	37	
1	4.80	1	3.50	-	-	1	3.50	2	9.60	38	
2	2.40	4	6.25	19	3.66	7	5.21	21	3.54	39	
-	-	2	6.50	-	-	2	6.50	-	-	40	
1	2.40	1	6.00	5	4.80	3	4.17	6	4.40	41	
1	2.40	1	6.00	14	3.28	2	5.50	15	3.20	42	

## RECAPITULATION.

CLASSIFICATION.	NATIVE BORN				FOREIGN BORN	
	WEEKLY EARNINGS		VALUE OF WORK-RELIEF		WEEKLY EARNINGS	
	Number Re- porting	Aver- age	Num- ber Sup- plied	Aver- age	Number Re- porting	Aver- age
1 Shop work, . . . . .	370	\$4.63	356	\$10.02	623	\$4.70
2 Home work, . . . . .	32	3.97	114	10.42	89	3.72
3 Domestic and personal service, . .	190	3.60	196	8.41	409	3.84
4 Not given, . . . . .	30	4.69	69	7.44	85	4.20
5 TOTALS, . . . . .	622	\$4.29	735	\$9.41	1,206	\$4.80

This table is exceedingly interesting. Let us consider first the recapitulation. The first line indicates that, in the aggregate, 1,084 applicants were engaged in shop work prior to applying for work-relief, 137 were engaged in home work, 702 were engaged in domestic and personal service, and 142 did not report their occupation. The designation "domestic and personal service" requires some explanation. It includes domestic employments and such other work as is usually performed in the home rather than in the shop, and yet which was performed by the applicant for wages. The principal occupations classified under this head are washing and other laundry work, sewing, housework, waiting upon table, nursing, and general domestic service. The applicants engaged in shop work earned, upon the average, \$4.71 before being thrown out of employment. Of this class, 1,025 persons were supplied with work and the average wages paid to them was \$9.51. The 137 persons who reported wages earned at their own homes received, upon the average, \$3.67; 570 persons of this class were supplied with work by the committee to the extent of \$9.96 upon the average; 702 persons reported themselves as occupied in domestic and personal service, and their average weekly wages were \$3.76. Of this class, 787 persons received work from the committee, the average amount of wages paid them being \$7.82. The persons whose occupation was not given, but who reported their wages prior to being thrown out of employment, numbered 142, the average wages being \$4.45. Of this class, 346 received work from the committee, the average amount of wages paid them being \$7.14.

RECAPITULATION.

FOREIGN BORN		BIRTHPLACE NOT GIVEN				AGGREGATES					
VALUE OF WORK-RELIEF		WEEKLY EARNINGS		VALUE OF WORK-RELIEF		WEEKLY EARNINGS		VALUE OF WORK-RELIEF			
Num-ber Sup-plied	Aver-age	Number Re-ported	Aver-age	Num-ber Sup-plied	Aver-age	Number Re-ported	Aver-age	Num-ber Sup-plied	Aver-age		
576	\$9.75	91	\$5.05	93	\$6.01	1,084	\$4.71	1,025	\$9.51	1	
404	10.06	16	2.80	52	8.17	137	3.67	570	9.96	2	
460	8.29	103	3.70	131	5.31	702	3.76	787	7.82	3	
188	9.11	27	4.97	119	4.34	142	4.45	346	7.14	4	
1,598	\$9.35	237	\$4.30	395	\$5.56	2,065	\$4.30	2,728	\$8.82	5	

The first noticeable point in the figures we have cited is the uniformity in the amount of relief furnished to the different classes named in the table, the lowest average amount of work-relief being \$7.14 and the highest \$9.96. The aggregate number reporting wages was 2,065, and the average wages reported, \$4.30. In the aggregate, 2,728 persons received work, and the average value of work-relief furnished, or average amount of wages paid, was \$8.82. The second noticeable point is the fact that nearly 50 per cent of the total number of applicants supplied with work were persons engaged in home work or domestic service. Only 37.57 per cent of the total number can be definitely classed as having been engaged in shop work. Thus, although the industrial depression seriously affected all factory industries, as is plainly shown by tables elsewhere presented in this report, still, among the women who were relieved at Bedford street, more than 50 per cent were persons who were not engaged in such industries. This statement holds true with reference to both native born and foreign born among these women. The third point worthy of notice is the important fact that the amount of relief furnished in the way of wages for work done was, upon the average, so far as the aggregate number of applicants is concerned, only equivalent to slightly more than two full weeks' pay at the average wage reported to have been earned by the applicant prior to being thrown out of employment. Substantially the same statement is to be made with reference to the applicants who were previously engaged in shop work, those engaged in domestic and personal service, and those whose occupations are not given.

The average weekly earnings of native and foreign born among the applicants do not greatly differ, being \$4.29 and \$4.30, respectively, and the amount of work-relief furnished in the form of wages paid was practically the same for each class, being \$9.41 for the persons of native birth and \$9.35 for the foreign born.

If the presentation for each of the wards shown in the table be noted, it will be seen that the amount of work-relief, measured by wages paid, was remarkably uniform throughout the city. The lowest average found in any ward which is definitely specified, \$7.20, appears in ward 25, and the highest, \$10.51, in ward 4. The ratio between previous earnings and the amount of work-relief furnished is also substantially uni-

	THE CITY, AND VALUE OF WORK-RELIEF.	SHOP WORK				HOME WORK			
		Native Born	Foreign Born	Birth- place not Given	Totals	Native Born	Foreign Born	Birth- place not Given	Totals
1	THE CITY OF BOSTON.	856	576	98	1,025	114	404	52	570
2	\$2.40, . . . . .	51	94	34	179	13	58	14	85
3	\$4.80, . . . . .	44	78	22	144	8	50	6	64
4	\$7.20, . . . . .	56	86	17	159	18	52	8	73
5	\$9.60, . . . . .	46	81	7	134	21	68	6	95
6	\$12.00, . . . . .	57	82	8	147	21	56	10	87
7	\$14.40, . . . . .	44	67	-	111	19	55	4	78
8	\$16.80, . . . . .	30	38	4	72	6	37	3	46
9	\$19.20, . . . . .	21	30	1	52	5	21	1	27
10	\$21.60, . . . . .	4	11	-	15	3	3	-	6
11	\$24.00, . . . . .	2	8	-	10	-	2	-	2
12	\$26.40, . . . . .	-	-	-	-	-	1	-	1
13	\$28.80, . . . . .	1	1	-	2	-	-	-	-
14	\$31.20, . . . . .	-	-	-	-	-	1	-	1

It will be understood, in considering the above table, that the applicants at Bedford street worked in shifts covering three days each, a uniform wage of 80 cents a day being paid. Persons who worked only three days, therefore, received \$2.40; those who worked six days received \$4.80; and so on, the amount of relief always being equivalent to multiples of three days' wages at 80 cents per day.

Turning to the first line of the table, it will be seen that 179 persons who had previously been engaged in shop work

form throughout the wards, the work-relief never greatly exceeding twice the amount of the weekly wage earned by the applicant prior to being thrown out of employment. The widest difference appears in the ward which received the largest amount of work-relief, namely, ward 4. In this ward, 37 applicants were supplied with work, the average wage for 34 of the applicants who reported as to this point being \$4.38, while the average amount of work-relief furnished was \$10.51.

The next table presents, for the city at large, the number of persons who received work-relief of different specified amounts, classified with respect to their previous occupation, and also with respect to nativity.

DOMESTIC AND PERSONAL SERVICE				NOT GIVEN				AGGREGATES				
Native Born	Foreign Born	Birth-place not Given	Totals	Native Born	Foreign Born	Birth-place not Given	Totals	Native Born	Foreign Born	Birth-place not Given	Totals	
198	460	131	787	69	158	119	346	735	1,508	395	2,728	1
45	98	55	198	22	34	72	128	131	234	175	590	2
35	85	37	157	11	16	25	52	98	229	90	417	3
28	61	18	106	13	19	10	42	112	218	53	384	4
25	75	10	110	7	32	4	43	99	256	27	382	5
23	69	2	99	3	21	3	27	109	228	23	360	6
21	35	7	63	6	18	3	27	90	175	14	279	7
6	22	1	29	5	8	2	15	47	106	10	162	8
5	11	1	17	1	10	-	11	32	72	3	107	9
4	2	-	6	1	-	-	1	12	16	-	28	10
1	1	-	2	-	-	-	-	3	11	-	14	11
-	-	-	-	-	-	-	-	-	1	-	1	12
-	1	-	1	-	-	-	-	1	2	-	3	13
-	-	-	-	-	-	-	-	-	1	-	1	14

received work-relief to the amount of \$2.40 each. Of these, 51 were native born, and 94 foreign born, the place of birth not being given for 34. Persons who had been employed at home numbered 85, of whom 13 were native born, 58 foreign born, and 14 of birthplace not given. These received work-relief amounting to \$2.40 each. Persons previously engaged in domestic and personal service numbered 198, of whom 45 were native born, 98 foreign born, and 55 of birthplace not given. The work-relief given these persons amounted to \$2.40 each. Of

the class whose previous occupation was not given, there were 128, of whom 22 were native born, 34 foreign born, and 72 of birthplace not given, who also received \$2.40 each.

Summarizing these figures, we find that, in the aggregate, 590 persons received work-relief amounting to \$2.40 each. Of these, 131 were native born, 284 foreign born, and 175 of birthplace not given. The number of persons who received work-relief amounting to \$2.40 each, was larger than the number receiving any other amount; 417 persons in the aggregate receiving \$4.80 each; 384, \$7.20; 382, \$9.60; 360, \$12; 279, \$14.40; while above this class the numbers grow rapidly smaller, only one person receiving aid to the amount of \$31.20, three receiving \$28.80 each, and only one, \$26.40. It will be remembered that each of the amounts specified indicates the number of days which the recipients worked, which may be found by dividing the value of work-relief by 80, the divisor representing the amount of one day's pay. Each of the classes shown in the table may be separately analyzed, but the method will be apparent from the illustration we have given.

An investigation, conducted by the sub-committee in charge of the work at Bedford street, determined whether or not the applicants for relief had previously received aid through the Associated Charities. The results of this investigation are shown in the following table:

WARDS AND PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITUTIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
<b>WARD I.</b>						
<i>Native Born.</i>	11	10	21	8	13	21
Aided by C. R. C.,* . . . .	9	5	14	6	8	14
Not aided by C. R. C.,* . . . .	2	5	7	2	5	7
<i>Foreign Born.</i>	11	8	19	10	9	19
Aided by C. R. C., . . . .	9	6	15	7	8	15
Not aided by C. R. C., . . . .	2	2	4	3	1	4
<i>Birthplace not Given.</i>	5	3	8	3	5	8
Aided by C. R. C., . . . .	4	3	7	2	5	7
Not aided by C. R. C., . . . .	1	-	1	1	-	1
<i>Aggregates.</i>	27	21	48	21	27	48
Aided by C. R. C., . . . .	22	14	36	15	21	36
Not aided by C. R. C., . . . .	5	7	12	6	6	12

\* Citizens Relief Committee.

WARDS AND PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITU- TIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
<b>WARD 2.</b>						
<i>Native Born.</i>	2	12	14	1	13	14
Aided by C. R. C.,* . . .	2	11	13	1	12	13
Not aided by C. R. C.,* . . .	-	1	1	-	1	1
<i>Foreign Born.</i>	18	32	50	14	36	50
Aided by C. R. C., . . .	16	26	41	11	30	41
Not aided by C. R. C., . . .	2	6	8	3	6	9
<i>Birthplace not Given.</i>	3	8	11	2	9	11
Aided by C. R. C., . . .	1	6	7	1	6	7
Not aided by C. R. C., . . .	2	2	4	1	3	4
<i>Aggregates.</i>	23	52	75	17	58	75
Aided by C. R. C., . . .	18	43	61	13	48	61
Not aided by C. R. C., . . .	5	9	14	4	10	14
<b>WARD 3.</b>						
<i>Native Born.</i>	6	11	17	5	12	17
Aided by C. R. C., . . .	5	10	15	4	11	15
Not aided by C. R. C., . . .	1	1	2	1	1	2
<i>Foreign Born.</i>	12	19	31	11	20	31
Aided by C. R. C., . . .	11	14	25	10	15	25
Not aided by C. R. C., . . .	1	5	6	1	5	6
<i>Birthplace not Given.</i>	1	2	3	1	2	3
Aided by C. R. C., . . .	-	2	2	-	2	2
Not aided by C. R. C., . . .	1	-	1	1	-	1
<i>Aggregates.</i>	19	32	51	17	34	51
Aided by C. R. C., . . .	16	26	42	14	28	42
Not aided by C. R. C., . . .	3	6	9	3	6	9
<b>WARD 4.</b>						
<i>Native Born.</i>	7	14	21	6	15	21
Aided by C. R. C., . . .	6	13	19	5	14	19
Not aided by C. R. C., . . .	1	1	2	1	1	2
<i>Foreign Born.</i>	4	12	16	2	14	16
Aided by C. R. C., . . .	1	10	11	-	11	11
Not aided by C. R. C., . . .	3	2	5	2	3	5
<i>Birthplace not Given.</i>	6	10	16	6	10	16
Aided by C. R. C., . . .	4	8	12	4	8	12
Not aided by C. R. C., . . .	2	2	4	2	2	4
<i>Aggregates.</i>	17	36	53	14	39	53
Aided by C. R. C., . . .	11	26	37	9	28	37
Not aided by C. R. C., . . .	6	10	16	5	11	16

\* Citizens Relief Committee.



WARDS AND PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITU- TIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
<b>WARD 5.</b>						
<i>Native Born.</i>	5	8	13	4	9	13
Aided by C. R. C.,* . . . .	4	6	10	3	7	10
Not aided by C. R. C.,* . . .	1	2	3	1	2	3
<i>Foreign Born.</i>	17	18	35	11	24	35
Aided by C. R. C., . . . .	16	15	31	10	21	31
Not aided by C. R. C., . . .	1	3	4	1	3	4
<i>Birthplace not Given.</i>	1	6	7	-	7	7
Aided by C. R. C., . . . .	1	3	4	-	4	4
Not aided by C. R. C., . . .	-	3	3	-	3	3
<i>Aggregates.</i>	23	32	55	15	40	55
Aided by C. R. C., . . . .	21	24	45	13	32	45
Not aided by C. R. C., . . .	2	8	10	2	8	10
<b>WARD 6.</b>						
<i>Native Born.</i>	17	25	42	13	29	42
Aided by C. R. C., . . . .	15	24	39	11	28	39
Not aided by C. R. C., . . .	2	1	3	2	1	3
<i>Foreign Born.</i>	71	151	222	51	171	222
Aided by C. R. C., . . . .	57	115	172	42	130	172
Not aided by C. R. C., . . .	14	36	50	9	41	50
<i>Birthplace not Given.</i>	5	26	31	5	26	31
Aided by C. R. C., . . . .	4	17	21	4	17	21
Not aided by C. R. C., . . .	1	9	10	1	9	10
<i>Aggregates.</i>	93	202	295	69	226	295
Aided by C. R. C., . . . .	76	156	232	57	175	232
Not aided by C. R. C., . . .	17	46	63	12	51	63
<b>WARD 7.</b>						
<i>Native Born.</i>	12	12	24	7	17	24
Aided by C. R. C., . . . .	11	8	19	7	12	19
Not aided by C. R. C., . . .	1	4	5	-	5	5
<i>Foreign Born.</i>	61	170	231	36	195	231
Aided by C. R. C., . . . .	49	130	179	28	151	179
Not aided by C. R. C., . . .	12	40	52	8	44	52
<i>Birthplace not Given.</i>	6	26	32	3	29	32
Aided by C. R. C., . . . .	5	18	23	3	21	23
Not aided by C. R. C., . . .	1	8	9	1	8	9
<i>Aggregates.</i>	79	208	287	46	241	287
Aided by C. R. C., . . . .	65	156	221	37	184	221
Not aided by C. R. C., . . .	14	52	66	9	57	66

\* Citizens Relief Committee.

WARDS AND PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITU- TIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
<b>WARD 8.</b>						
<i>Native Born.</i>	24	24	48	17	31	48
Aided by C. R. C.,* . . . .	19	16	35	14	21	35
Not aided by C. R. C.,* . . . .	5	8	13	3	10	13
<i>Foreign Born.</i>	54	239	293	54	239	293
Aided by C. R. C., . . . .	50	199	249	50	199	249
Not aided by C. R. C., . . . .	4	40	44	4	40	44
<i>Birthplace not Given.</i>	7	43	50	5	45	50
Aided by C. R. C., . . . .	6	27	33	5	28	33
Not aided by C. R. C., . . . .	1	16	17	-	17	17
<i>Aggregates.</i>	85	306	391	76	315	391
Aided by C. R. C., . . . .	75	242	317	69	248	317
Not aided by C. R. C., . . . .	10	64	74	7	67	74
<b>WARD 9.</b>						
<i>Native Born.</i>	18	22	40	11	29	40
Aided by C. R. C., . . . .	15	17	32	9	23	32
Not aided by C. R. C., . . . .	3	5	8	2	6	8
<i>Foreign Born.</i>	17	21	38	12	26	38
Aided by C. R. C., . . . .	14	18	32	9	23	32
Not aided by C. R. C., . . . .	3	3	6	3	3	6
<i>Birthplace not Given.</i>	7	12	19	4	15	19
Aided by C. R. C., . . . .	4	7	11	3	8	11
Not aided by C. R. C., . . . .	3	5	8	1	7	8
<i>Aggregates.</i>	42	55	97	27	70	97
Aided by C. R. C., . . . .	33	42	75	21	54	75
Not aided by C. R. C., . . . .	9	13	22	6	16	22
<b>WARD 10.</b>						
<i>Native Born.</i>	3	10	13	2	11	13
Aided by C. R. C., . . . .	2	7	9	1	8	9
Not aided by C. R. C., . . . .	1	3	4	1	3	4
<i>Foreign Born.</i>	1	17	18	-	18	18
Aided by C. R. C., . . . .	1	9	10	-	10	10
Not aided by C. R. C., . . . .	-	8	8	-	8	8
<i>Birthplace not Given.</i>	6	13	19	4	15	19
Aided by C. R. C., . . . .	3	6	9	2	7	9
Not aided by C. R. C., . . . .	3	7	10	2	8	10
<i>Aggregates.</i>	10	40	50	6	44	50
Aided by C. R. C., . . . .	6	22	28	3	25	28
Not aided by C. R. C., . . . .	4	18	22	3	19	22

\* Citizens Relief Committee.

WARDS AND PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITU- TIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
<b>WARD 11.</b>						
<i>Native Born.</i>	7	19	26	6	20	26
Aided by C. R. C.,* . . . .	6	15	21	5	16	21
Not aided by C. R. C.,* . . . .	1	4	5	1	4	5
<i>Foreign Born.</i>	18	18	36	12	24	36
Aided by C. R. C., . . . .	15	10	25	10	15	25
Not aided by C. R. C., . . . .	3	8	11	2	9	11
<i>Birthplace not Given.</i>	10	14	24	7	17	24
Aided by C. R. C., . . . .	10	7	17	7	10	17
Not aided by C. R. C., . . . .	-	7	7	-	7	7
<i>Aggregates.</i>	35	51	86	25	61	86
Aided by C. R. C., . . . .	31	32	63	22	41	63
Not aided by C. R. C., . . . .	4	19	23	3	20	23
<b>WARD 12.</b>						
<i>Native Born.</i>	23	54	82	18	64	82
Aided by C. R. C., . . . .	25	42	67	16	51	67
Not aided by C. R. C., . . . .	3	12	15	2	13	15
<i>Foreign Born.</i>	93	83	176	60	107	176
Aided by C. R. C., . . . .	73	59	132	55	77	132
Not aided by C. R. C., . . . .	20	24	44	14	30	44
<i>Birthplace not Given.</i>	17	47	64	9	55	64
Aided by C. R. C., . . . .	10	31	41	7	34	41
Not aided by C. R. C., . . . .	7	16	23	2	21	23
<i>Aggregates.</i>	133	184	322	96	226	322
Aided by C. R. C., . . . .	108	132	240	78	162	240
Not aided by C. R. C., . . . .	30	52	82	18	64	82
<b>WARD 13.</b>						
<i>Native Born.</i>	42	91	133	34	99	133
Aided by C. R. C., . . . .	38	80	118	31	87	118
Not aided by C. R. C., . . . .	4	11	15	3	12	15
<i>Foreign Born.</i>	105	123	228	85	143	228
Aided by C. R. C., . . . .	82	94	176	66	110	176
Not aided by C. R. C., . . . .	23	29	52	19	33	52
<i>Birthplace not Given.</i>	17	40	57	12	45	57
Aided by C. R. C., . . . .	13	20	33	10	23	33
Not aided by C. R. C., . . . .	4	20	24	2	22	24
<i>Aggregates.</i>	164	254	418	131	287	418
Aided by C. R. C., . . . .	133	194	327	107	220	327
Not aided by C. R. C., . . . .	31	60	91	24	67	91

\* Citizens Relief Committee.

WARDS AND PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITU- TIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
<b>WARD 14.</b>						
<i>Native Born.</i>	30	43	73	24	49	73
Aided by C. R. C.,* . . . .	26	36	62	20	42	62
Not aided by C. R. C.,* . . . .	4	7	11	4	7	11
<i>Foreign Born.</i>	26	32	58	20	38	58
Aided by C. R. C., . . . .	23	31	54	17	37	54
Not aided by C. R. C., . . . .	3	1	4	3	1	4
<i>Birthplace not Given.</i>	7	25	32	5	27	32
Aided by C. R. C., . . . .	6	22	28	5	23	28
Not aided by C. R. C., . . . .	1	3	4	-	4	4
<i>Aggregates.</i>	63	100	163	49	114	163
Aided by C. R. C., . . . .	55	89	144	42	102	144
Not aided by C. R. C., . . . .	8	11	19	7	12	19
<b>WARD 15.</b>						
<i>Native Born.</i>	10	32	42	7	35	42
Aided by C. R. C., . . . .	10	29	39	7	32	39
Not aided by C. R. C., . . . .	-	3	3	-	3	3
<i>Foreign Born.</i>	27	52	79	14	65	79
Aided by C. R. C., . . . .	23	45	68	12	56	68
Not aided by C. R. C., . . . .	4	7	11	2	9	11
<i>Birthplace not Given.</i>	7	17	24	5	19	24
Aided by C. R. C., . . . .	6	17	23	4	19	23
Not aided by C. R. C., . . . .	1	-	1	1	-	1
<i>Aggregates.</i>	44	101	145	26	119	145
Aided by C. R. C., . . . .	39	91	130	23	107	130
Not aided by C. R. C., . . . .	5	10	15	3	12	15
<b>WARD 16.</b>						
<i>Native Born.</i>	24	44	68	20	48	68
Aided by C. R. C., . . . .	22	38	60	18	42	60
Not aided by C. R. C., . . . .	2	6	8	2	6	8
<i>Foreign Born.</i>	65	142	207	50	157	207
Aided by C. R. C., . . . .	54	108	162	42	120	162
Not aided by C. R. C., . . . .	11	34	45	8	37	45
<i>Birthplace not Given.</i>	14	47	61	4	57	61
Aided by C. R. C., . . . .	11	29	40	3	38	40
Not aided by C. R. C., . . . .	3	18	21	2	19	21
<i>Aggregates.</i>	103	233	336	74	262	336
Aided by C. R. C., . . . .	87	175	262	62	200	262
Not aided by C. R. C., . . . .	16	58	74	12	62	74

WARDS AND PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITU- TIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
<b>WARD 17.</b>						
<i>Native Born.</i>	18	40	58	18	40	58
Aided by C. R. C.,* . . . .	10	27	37	11	26	37
Not aided by C. R. C.,* . . . .	8	13	16	2	14	16
<i>Foreign Born.</i>	28	37	65	18	47	65
Aided by C. R. C., . . . .	21	26	47	12	35	47
Not aided by C. R. C., . . . .	7	11	18	6	12	18
<i>Birthplace not Given.</i>	8	21	29	7	22	29
Aided by C. R. C., . . . .	4	16	20	4	16	20
Not aided by C. R. C., . . . .	4	5	9	3	6	9
<i>Aggregates.</i>	49	98	147	38	109	147
Aided by C. R. C., . . . .	35	69	104	27	77	104
Not aided by C. R. C., . . . .	14	29	43	11	32	43
<b>WARD 18.</b>						
<i>Native Born.</i>	8	17	25	7	18	25
Aided by C. R. C., . . . .	8	15	23	7	16	23
Not aided by C. R. C., . . . .	-	2	2	-	2	2
<i>Foreign Born.</i>	13	22	35	12	23	35
Aided by C. R. C., . . . .	11	16	27	10	17	27
Not aided by C. R. C., . . . .	2	6	8	2	6	8
<i>Birthplace not Given.</i>	2	8	10	4	6	10
Aided by C. R. C., . . . .	1	5	6	3	3	6
Not aided by C. R. C., . . . .	1	3	4	1	3	4
<i>Aggregates.</i>	23	47	70	23	47	70
Aided by C. R. C., . . . .	20	36	56	20	36	56
Not aided by C. R. C., . . . .	3	11	14	3	11	14
<b>WARD 19.</b>						
<i>Native Born.</i>	25	30	55	22	33	55
Aided by C. R. C., . . . .	20	19	39	18	21	39
Not aided by C. R. C., . . . .	5	11	16	4	12	16
<i>Foreign Born.</i>	21	38	59	19	40	59
Aided by C. R. C., . . . .	16	32	48	14	34	48
Not aided by C. R. C., . . . .	5	6	11	5	6	11
<i>Birthplace not Given.</i>	6	17	23	4	19	23
Aided by C. R. C., . . . .	3	11	14	1	13	14
Not aided by C. R. C., . . . .	3	6	9	3	6	9
<i>Aggregates.</i>	52	85	137	45	92	137
Aided by C. R. C., . . . .	39	62	101	33	68	101
Not aided by C. R. C., . . . .	13	23	36	12	24	36

\* Citizens Relief Committee.

WARDS AND PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITU- TIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
WARD 20.						
Native Born.	22	20	42	15	27	42
Aided by C. R. C.,* . . . .	20	15	35	14	21	35
Not aided by C. R. C.,* . . . .	2	5	7	1	6	7
Foreign Born.	21	20	41	16	25	41
Aided by C. R. C., . . . . .	17	16	33	15	18	33
Not aided by C. R. C., . . . . .	4	4	8	1	7	8
Birthplace not Given.	3	15	18	-	18	18
Aided by C. R. C., . . . . .	3	8	11	-	11	11
Not aided by C. R. C., . . . . .	-	7	7	-	7	7
Aggregates.	46	55	101	31	70	101
Aided by C. R. C., . . . . .	40	39	79	29	50	79
Not aided by C. R. C., . . . . .	6	16	22	2	20	22
WARD 21.						
Native Born.	3	5	8	3	5	8
Aided by C. R. C., . . . . .	3	3	6	3	3	6
Not aided by C. R. C., . . . . .	-	2	2	-	2	2
Foreign Born.	6	6	12	5	7	12
Aided by C. R. C., . . . . .	4	4	8	3	5	8
Not aided by C. R. C., . . . . .	2	2	4	2	2	4
Birthplace not Given.	1	5	6	1	5	6
Aided by C. R. C., . . . . .	-	5	5	-	5	5
Not aided by C. R. C., . . . . .	1	-	1	1	-	1
Aggregates.	10	16	26	9	17	26
Aided by C. R. C., . . . . .	7	12	19	6	13	19
Not aided by C. R. C., . . . . .	3	4	7	3	4	7
WARD 22.						
Native Born.	9	8	17	7	10	17
Aided by C. R. C., . . . . .	9	5	14	7	7	14
Not aided by C. R. C., . . . . .	-	3	3	-	3	3
Foreign Born.	10	26	36	8	28	36
Aided by C. R. C., . . . . .	7	22	29	6	23	29
Not aided by C. R. C., . . . . .	3	4	7	2	5	7
Birthplace not Given.	1	3	4	1	3	4
Aided by C. R. C., . . . . .	1	2	3	1	2	3
Not aided by C. R. C., . . . . .	-	1	1	-	1	1
Aggregates.	20	37	57	16	41	57
Aided by C. R. C., . . . . .	17	29	46	14	32	46
Not aided by C. R. C., . . . . .	3	8	11	2	9	11

\* Citizens Relief Committee.

WARDS AND PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITU- TIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
<b>WARD 23.</b>						
<i>Native Born.</i>	2	13	15	1	14	15
Aided by C. R. C.,* . . . .	1	12	13	1	12	13
Not aided by C. R. C.,* . . . .	1	1	2	-	2	2
<i>Foreign Born.</i>	3	22	25	3	22	25
Aided by C. R. C., . . . .	2	19	21	2	19	21
Not aided by C. R. C., . . . .	1	3	4	1	3	4
<i>Birthplace not Given.</i>	1	8	9	-	9	9
Aided by C. R. C., . . . .	1	5	6	-	6	6
Not aided by C. R. C., . . . .	-	3	3	-	3	3
<i>Aggregates.</i>	6	43	49	4	45	49
Aided by C. R. C., . . . .	4	36	40	3	37	40
Not aided by C. R. C., . . . .	2	7	9	1	8	9
<b>WARD 24.</b>						
<i>Native Born.</i>	3	4	7	2	5	7
Aided by C. R. C., . . . .	3	2	5	2	3	5
Not aided by C. R. C., . . . .	-	2	2	-	2	2
<i>Foreign Born.</i>	5	5	10	2	8	10
Aided by C. R. C., . . . .	5	3	8	2	6	8
Not aided by C. R. C., . . . .	-	2	2	-	2	2
<i>Birthplace not Given.</i>	1	7	8	1	7	8
Aided by C. R. C., . . . .	-	5	5	-	5	5
Not aided by C. R. C., . . . .	1	2	3	1	2	3
<i>Aggregates.</i>	9	16	25	5	20	25
Aided by C. R. C., . . . .	8	10	18	4	14	18
Not aided by C. R. C., . . . .	1	6	7	1	6	7
<b>WARD 25.</b>						
<i>Native Born.</i>	-	1	1	-	1	1
Aided by C. R. C., . . . .	-	1	1	-	1	1
Not aided by C. R. C., . . . .	-	-	-	-	-	-
<i>Foreign Born.</i>	2	-	2	-	2	2
Aided by C. R. C., . . . .	2	-	2	-	2	2
Not aided by C. R. C., . . . .	-	-	-	-	-	-
<i>Birthplace not Given.</i>	-	1	1	-	1	1
Aided by C. R. C., . . . .	-	-	-	-	-	-
Not aided by C. R. C., . . . .	-	1	1	-	1	1
<i>Aggregates.</i>	2	2	4	-	4	4
Aided by C. R. C., . . . .	2	1	3	-	3	3
Not aided by C. R. C., . . . .	-	1	1	-	1	1

\* Citizens Relief Committee.

WARDS AND PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITU- TIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
WARD NOT SPECIFIED.						
Native Born.	-	-	-	-	-	-
Aided by C. R. C.,* . . . .	-	-	-	-	-	-
Not aided by C. R. C.,* . . . .	-	-	-	-	-	-
Foreign Born.	-	6	6	-	6	6
Aided by C. R. C., . . . .	-	2	2	-	2	2
Not aided by C. R. C., . . . .	-	4	4	-	4	4
Birthplace not Given.	1	30	31	3	28	31
Aided by C. R. C., . . . .	1	18	19	3	16	19
Not aided by C. R. C., . . . .	-	12	12	-	12	12
Aggregates.	1	36	37	3	34	37
Aided by C. R. C., . . . .	1	20	21	3	18	21
Not aided by C. R. C., . . . .	-	16	16	-	16	16
THE CITY OF BOSTON.						
Native Born.	331	569	900	253	647	900
Aided by C. R. C., . . . .	289	456	745	221	524	745
Not aided by C. R. C., . . . .	42	113	155	32	123	155
Foreign Born.	709	1,319	2,028	534	1,494	2,028
Aided by C. R. C., . . . .	578	1,029	1,607	433	1,174	1,607
Not aided by C. R. C., . . . .	131	290	421	101	320	421
Birthplace not Given.	143	454	597	96	501	597
Aided by C. R. C., . . . .	102	293	395	70	325	395
Not aided by C. R. C., . . . .	41	161	202	26	176	202
Aggregates.	1,183	2,342	3,525	883	2,642	3,525
Aided by C. R. C., . . . .	909	1,778	2,747	724	2,023	2,747
Not aided by C. R. C., . . . .	214	564	778	159	619	778

\* Citizens Relief Committee.

In the above table the applicants are classified with respect to whether or not they had received previous charity relief, as recorded by the Associated Charities, from associations, institutions, etc. The information is presented by wards for the native and foreign born and for those whose birthplace is not given, separately, with aggregates.

From the recapitulation, it appears that of the 3,525 applicants, the names of 1,183 were found to have been recorded upon the books of the Associated Charities, while the others, 2,342 in number, were not so recorded. Of the 3,525 persons making applications for work-relief, 883 had received aid through asso-



ciations, institutions, etc.; while 2,642 had not received such aid. This shows that 74.95 per cent of the whole number of applicants had not applied for relief of any kind until they were forced to do so by the prevailing industrial depression.

	CLASSIFIED WEEKLY EARNINGS.	SHOP WORK				HOME WORK			
		Native Born	Foreign Born	Birth- place not Given	Totals	Native Born	Foreign Born	Birth- place not Given	Totals
1	Under \$1, . . .	-	-	-	-	2	3	-	5
2	\$1 but under \$2, .	4	7	-	11	2	12	5	19
3	\$2 but under \$3, .	30	35	4	69	7	18	4	29
4	\$3 but under \$4, .	70	108	17	195	7	16	4	27
5	\$4 but under \$5, .	95	174	25	294	4	11	1	16
6	\$5 but under \$6, .	81	148	19	248	2	15	1	18
7	\$6 but under \$7, .	62	103	11	176	2	10	-	12
8	\$7 but under \$8, .	17	27	7	51	4	-	1	5
9	\$8 but under \$9, .	7	11	6	24	1	-	-	1
10	\$9 but under \$10, .	1	6	-	7	1	2	-	3
11	\$10 and over, . . .	3	4	2	9	-	2	-	2
12	Piece work, . . .	6	5	-	11	3	3	-	11
13	TOTALS, . . .	376	628	91	1,095	35	97	16	148

Referring to the final column in the above table, we find the largest aggregations in the classes whose previous wages were from \$3 to \$6. These statistics of previous earnings are strikingly indicative of the industrial status of the applicants. It has been conclusively shown in previous reports of this Bureau, based upon returns covering all the industries in the Commonwealth, that 72.94 per cent of all females employed in the manufacturing and mechanical industries in this Commonwealth receive less than \$7 per week. The figures contained in the above table indicate that of the applicants for work-relief at the Bedford street rooms, 1,902, or 88.18 per cent, received less than \$7 per week. Of all females employed in manufacturing and mechanical industries 34.59 per cent received less than \$5 per week, while 59.71 per cent of the applicants were paid similar wages. That is to say, a much larger proportion of the applicants were of an inferior wage class than obtains in the manufacturing industries in the Commonwealth at large. This, indeed, might be expected from the fact that so large a proportion of the applicants were

The next table presents information as to the classified weekly earnings of the applicants prior to being thrown out of employment. This information is presented for the city as a whole.

DOMESTIC AND PERSONAL SERVICE				NOT GIVEN				AGGREGATES				
Native Born	Foreign Born	Birth-place not Given	Totals	Native Born	Foreign Born	Birth-place not Given	Totals	Native Born	Foreign Born	Birth-place not Given	Totals	
6	17	1	24	-	-	-	-	8	20	1	29	1
19	32	10	61	2	6	2	10	27	57	17	101	2
31	46	14	90	4	12	2	18	72	110	24	206	3
57	125	34	216	5	22	3	30	139	271	58	468	4
36	89	22	147	5	14	8	27	140	288	56	484	5
19	37	6	62	3	10	1	14	105	210	27	342	6
11	37	9	57	8	12	7	27	83	162	27	272	7
6	11	3	20	1	5	3	9	28	43	14	85	8
2	5	3	10	1	4	-	5	11	20	9	40	9
2	3	1	6	-	-	-	-	4	11	1	16	10
1	8	-	9	1	-	1	2	5	14	3	22	11
15	42	6	63	2	3	2	7	26	58	8	92	12
205	451	109	765	32	88	29	149	648	1,264	245	2,157	13

engaged in domestic and personal service, or worked at home. If the comparison be confined to those engaged in shop work alone, we find that while, as just stated, 72.94 per cent of all females employed in the industries of Massachusetts received less than \$7 per week, and 34.59 per cent received less than \$5 per week; of the females who applied for work at Bedford street, but who had previously been engaged in shop work, 90.68 per cent received less than \$7 per week and 51.96 per cent received less than \$5 per week.

No particular difference is observable between the native and foreign born with respect to the amount of wages previously earned. Of the native born, 574, or 88.58 per cent, received less than \$7 per week, and 386, or 59.57 per cent, received less than \$5 per week; while of the foreign born, 1,118, or 88.45 per cent, received less than \$7 per week, and 746, or 59.02 per cent, received less than \$5 per week. Not only are these percentages substantially the same in each of the classes specified, but they are also substantially the same as the percentages indicating the proportions of all applicants, in the aggregate, found in the respective wage classes.

The next table presents information as to the amount of rent paid by the families to which the applicants belonged.

THE CITY, AND WARDS.	APPLICANTS				APPLICANTS REPORTING RENT PAID					
	Report- ing Rent Paid	Not Report- ing Rent Paid	Board- ing	Totals	Num- ber	Num- ber of Per- sons	Num- ber of Rooms	Total Monthly Rent Paid	AVERAGES	
									Monthly Rent per Room	Per- son to a Room
THE CITY OF BOSTON.	1,983	870	672	3,525	1,983	7,340	5,086	\$17,479.14	\$3.44	1.44
Ward 1, .	33	4	11	48	33	147	107	269.44	2.52	1.37
Ward 2, .	48	18	9	75	48	220	166	422.12	2.54	1.33
Ward 3, .	30	12	9	51	30	115	86	225.02	2.62	1.34
Ward 4, .	31	11	11	53	31	135	103	279.20	2.71	1.31
Ward 5, .	38	12	5	55	38	121	100	318.65	3.14	1.21
Ward 6, .	172	48	75	295	172	672	379	1,516.51	4.00	1.77
Ward 7, .	170	46	71	287	170	708	382	1,670.88	4.37	1.85
Ward 8, .	225	74	92	391	225	747	503	2,136.63	4.25	1.49
Ward 9, .	51	27	19	97	51	136	107	461.25	4.31	1.27
Ward 10, .	27	15	8	50	27	55	31	197.17	6.36	1.77
Ward 11, .	53	26	7	86	53	129	94	456.08	4.85	1.37
Ward 12, .	178	97	47	322	178	464	328	1,509.38	4.60	1.41
Ward 13, .	244	81	93	418	244	1,022	760	1,998.47	2.63	1.34
Ward 14, .	97	36	30	163	97	476	325	780.62	2.40	1.46
Ward 15, .	83	25	27	145	83	417	308	785.92	2.55	1.35
Ward 16, .	165	116	55	336	165	528	349	1,450.82	4.16	1.51
Ward 17, .	79	49	19	147	79	237	172	651.16	3.79	1.38
Ward 18, .	40	17	13	70	40	122	91	347.59	3.82	1.34
Ward 19, .	80	33	19	137	80	298	236	732.10	3.10	1.26
Ward 20, .	55	22	24	101	55	243	176	507.79	2.89	1.36
Ward 21, .	11	9	6	26	11	46	35	98.16	2.80	1.31
Ward 22, .	33	19	5	57	33	162	117	304.78	2.60	1.38
Ward 23, .	25	12	12	49	25	85	87	232.74	2.68	0.98
Ward 24, .	12	10	3	25	12	47	40	111.08	2.78	1.18
Ward 25, .	1	3	-	4	1	1	1	6.50	6.50	1.00
Ward not spec- ified, .	2	33	2	37	2	7	3	14.08	4.69	2.33

The first line of the table gives the aggregates for the city. The number of applicants reporting the amount of rent paid by the families to which they belonged was 1,983; 870 not reporting any expenditure for rent, and 672 reporting themselves as boarding. The 1,983 applicants who reported rent paid represented 7,340 persons, who occupied 5,086 rooms, the total amount of monthly rent paid being \$17,479.14, or an average monthly rent of \$3.44, the average number of persons to a room being 1.44. The monthly rent per room paid by the applicants who reported themselves as paying rent,

ranges from \$2.40 in ward 14 to \$6.50 in ward 25, the last instance representing but a single case, and being considerably higher than the average monthly rent per room in other wards, except in ward 10, where a figure nearly as high appears, namely, \$6.36, an average resulting from reports made by 27 persons.

In general, the monthly rent per room does not rise above \$4.50 nor fall below \$2.50. The average number of persons to a room, represented in the families of the applicants in the wards specified, was highest in ward 7, namely, 1.85; and it was lowest in ward 23, namely, 0.98. A high average number of persons to a room (more than 1.50) appears in wards 6, 7, 10, and 16.

Complete information as to rents paid, the number of rooms to a tenement, and the number of persons to a room in each of the wards, and for the city as a whole, was presented by the Bureau in its report for 1890, in the first section of "A Tenement House Census," the title given by the Bureau to the investigation as to the condition of persons residing in rented tenements in the city, to which we have previously alluded.

For the purpose of comparing the information as to number of persons to a room and number of rooms to a tenement, in the tenements from which the applicants for work-relief came, with the average conditions obtaining in the wards and in the city, the following table is introduced:

THE CITY, AND WARDS.	APPLICANTS			TENEMENT HOUSE CENSUS		
	Number of Tenements Represented	Average Number of Rooms to a Tenement	Average Number of Persons to a Room	Average Number of Rooms to a Tenement	Average Number of Persons to a Room	Percentages of Total Population Residing in Tenements Having Number of Rooms Specified
THE CITY OF BOSTON.	*1,963	2.56	1.44	4.78	0.91	5.91 (less than 3 rooms)
Ward 1, . . .	33	3.24	1.87	5.05	0.87	12.62 (less than 4 rooms)
Ward 2, . . .	48	3.46	1.83	4.79	0.90	15.54 (less than 4 rooms)
Ward 3, . . .	30	2.53	1.84	4.91	0.85	2.27 (less than 3 rooms)
Ward 4, . . .	31	3.82	1.31	5.10	0.84	12.72 (less than 4 rooms)
Ward 5, . . .	38	2.63	1.21	4.90	0.89	2.98 (less than 3 rooms)
Ward 6, . . .	172	2.20	1.77	3.15	1.47	30.00 (less than 3 rooms)
Ward 7, . . .	170	2.25	1.85	3.49	1.38	25.87 (less than 3 rooms)
Ward 8, . . .	225	2.24	1.49	3.99	1.06	10.43 (less than 3 rooms)
Ward 9, . . .	51	2.10	1.27	4.63	0.88	13.95 (less than 3 rooms)
Ward 10, . . .	27	1.15	1.77	5.36	0.83	2.65 (less than 2 rooms)

\* Includes 2 tenements, ward not specified.

THE CITY, AND WARDS.	APPLICANTS			TENEMENT HOUSE CENSUS		
	Number of Tenements Represented	Average Number of Rooms to a Tenement	Average Number of Persons to a Room	Average Number of Rooms to a Tenement	Average Number of Persons to a Room	Percentages of Total Population Residing in Tenements Having Number of Rooms Specified
<b>THE CITY OF BOSTON</b> — <i>Con.</i>						
Ward 11, . . .	53	1.77	1.37	5.96	0.74	0.45 (less than 2 rooms)
Ward 12, . . .	178	1.84	1.41	4.92	1.03	2.59 (less than 2 rooms)
Ward 13, . . .	244	3.11	1.34	4.02	1.09	21.22 (less than 4 rooms)
Ward 14, . . .	97	3.35	1.46	4.97	0.88	14.07 (less than 4 rooms)
Ward 15, . . .	83	3.71	1.35	4.71	0.97	11.35 (less than 4 rooms)
Ward 16, . . .	165	2.12	1.51	4.09	0.98	10.88 (less than 3 rooms)
Ward 17, . . .	79	2.18	1.38	4.75	0.90	8.97 (less than 3 rooms)
Ward 18, . . .	40	2.28	1.34	6.09	0.74	3.63 (less than 3 rooms)
Ward 19, . . .	80	2.95	1.26	4.35	0.99	4.48 (less than 3 rooms)
Ward 20, . . .	55	3.20	1.38	4.89	0.87	21.23 (less than 4 rooms)
Ward 21, . . .	11	3.18	1.31	5.87	0.71	6.65 (less than 4 rooms)
Ward 22, . . .	33	3.55	1.38	4.31	1.00	30.18 (less than 4 rooms)
Ward 23, . . .	25	3.48	0.98	5.47	0.81	11.84 (less than 4 rooms)
Ward 24, . . .	12	3.33	1.18	5.80	0.76	9.98 (less than 4 rooms)
Ward 25, . . .	1	1.00	1.00	5.74	0.78	0.11 (less than 2 rooms)

Referring to the first line of this table, we note that, as returned by the applicants for work-relief, 1,983 tenements are represented, the average number of rooms to each tenement being 2.56, and the average number of persons to a room 1.44. Comparing this with the results for the city, shown in the Tenement House Census, we note that the average number of rooms to a rented tenement, if all tenements in the city are considered, is 4.78, the average number of persons to a room being 0.91. It therefore at once appears that the applicants came from tenements which were much smaller than the average, and much more crowded.

The final column of the table also shows that, considering the city as a whole, only 5.91 per cent of the population was found in tenements having less than three rooms; that is to say, in tenements as small as the average tenement from which the applicants for work-relief came. Substantially the same condition as is here indicated for the city as a whole will be found without exception in each of the wards. The average number of rooms in the tenements wherein the applicants resided is uniformly less than the average number of rooms in the tenements in the different wards considered as a whole; and the average number of persons to a room in the tenements

occupied by the applicants is considerably greater than the average number of persons to a room in all tenements in the ward.

Let us consider some of the wards in which the number of applicants was greatest. In ward 6, 172 tenements were represented by the applicants, and the average number of rooms to these tenements was 2.20; while the average number of rooms to all tenements in that ward is 3.15, and only 30 per cent of the population is living in tenements containing less than three rooms. The average number of persons to a room in the tenements occupied by the applicants in this ward was 1.77, while the average number of persons to a room in the tenements considered as a whole in the ward was 1.47. In some of the other wards much more noticeable differences appear. For instance, in ward 9, 51 tenements are represented by the applicants, the average number of rooms to a tenement being 2.10, while the average number of rooms to a tenement, if all tenements in the ward be considered, is 4.63, and only 13.95 per cent of the population in this ward is living in tenements containing less than three rooms. The average number of persons to a room in the tenements represented by the applicants in ward 9 was 1.27, while the average number of persons to a room in all tenements in the ward was 0.88. In ward 13, 244 tenements were represented by applicants for work-relief, and the average number of rooms in these tenements was 3.11. In this ward the average number of rooms to a tenement, if all tenements are considered, is 4.02, while the average number of persons to a room in the tenements occupied by the applicants was 1.34, and the average number of persons to a room in all tenements in the ward is 1.09. In this ward, 31.22 per cent of the population is residing in tenements of less than four rooms.

The figures contained in this table clearly show that the applicants for work-relief came from tenements which were much more crowded than the average obtaining in the wards respectively, and also that, with the exception of a few wards, comparatively small percentages of the population are residing in tenements as small as the tenements represented by the applicants. In every case, the percentage of population residing in tenements as small as those represented by the applicants is equivalent to less than one-third of the total population of the ward.

Besides the principal room on Bedford street, four smaller work-rooms for women were opened. The statistics of work-relief at three of these, located, respectively, at the Wells Memorial Hall, on Washington street, at 117 Berkeley street, and at the Berkeley Temple, will now be presented, beginning with the Wells Memorial.

The first table shows the number of applicants and the amount of work-relief for the city, by wards, classified so as to show the native and foreign born.

THE CITY, AND WARDS.	APPLICANTS				WORK-RELIEF			Value of Work- Relief
	Native Born	Foreign Born	Birth- place not Given	Totals	Number Supplied	Number not Supplied	Totals	
THE CITY OF BOSTON.	166	191	235	592	324	268	592	\$4,836.89
Ward 1, . . .	2	-	4	6	2	4	6	24.75
Ward 2, . . .	3	1	2	6	4	2	6	51.00
Ward 3, . . .	2	3	-	5	5	-	5	48.00
Ward 4, . . .	1	1	1	3	2	1	3	13.50
Ward 5, . . .	2	3	4	9	3	6	9	39.00
Ward 6, . . .	3	6	2	11	4	7	11	44.40
Ward 7, . . .	1	6	9	16	4	12	16	43.50
Ward 8, . . .	4	11	7	22	11	11	22	122.25
Ward 9, . . .	4	4	6	14	7	7	14	105.75
Ward 10, . . .	3	2	2	7	3	4	7	63.75
Ward 11, . . .	11	16	12	39	28	11	39	418.90
Ward 12, . . .	24	29	24	77	52	25	77	975.51
Ward 13, . . .	9	12	21	42	14	28	42	227.50
Ward 14, . . .	6	6	6	18	8	10	18	136.50
Ward 15, . . .	3	5	3	16	12	4	16	203.03
Ward 16, . . .	21	44	47	112	52	60	112	694.16
Ward 17, . . .	21	19	23	63	41	22	63	691.13
Ward 18, . . .	5	4	11	20	8	12	20	103.50
Ward 19, . . .	7	12	12	31	20	11	31	233.25
Ward 20, . . .	13	2	9	24	16	8	24	269.63
Ward 21, . . .	5	3	2	10	4	6	10	112.50
Ward 22, . . .	4	-	4	8	4	4	8	41.63
Ward 23, . . .	5	1	4	10	3	2	10	55.50
Ward 24, . . .	2	1	3	6	1	5	6	8.25
Ward not specified, .	-	-	17	17	11	6	17	34.75

As appears from the table, 592 applicants were registered at the Wells Memorial, of whom 324 were supplied with work, the aggregate amount of work-relief being \$4,836.89. The largest amount was disbursed to applicants from ward 12, 52 persons from this ward being supplied with work-relief to the amount of \$975.51. A like number of persons were supplied

with work from ward 16, to the amount of \$694.16, while 41 applicants from ward 17 received work to the amount of \$691.13. It will be noticed that, as shown in the tables relating to the Court House and Bedford street, the largest amount of work-relief seems to have been disbursed to applicants from the wards in which the crowded tenement conditions are found.

Of the applicants at the Wells Memorial, 166 were native born, 191 foreign born, while 235 were returned under the head of "birthplace not given."

Investigation as to ages disclosed 105 in the age period 14 to 19 years, 143 in the period 20 to 29, 97 in the period 30 to 39, 77 in the period 40 to 49, 25 in the period 50 to 59, while 11 applicants were above 60 years of age, the ages of 134 being unknown.

The occupations of the applicants, classified by age periods, are shown in the following table :

OCCUPATIONS.	AGE PERIODS				Age Unknown	ALL AGES
	Under 21	21 but under 45	45 but under 60	60 and over		
Cooks, . . . . .	-	3	1	-	1	5
Dressmakers, . . . . .	22	31	7	4	10	74
Employés (candy factory), . . .	6	2	-	-	-	8
Employés (cordage factory), . . .	4	2	-	-	-	6
Housewives, . . . . .	1	52	2	-	10	65
Housework, . . . . .	6	13	2	1	10	32
Laundry work, . . . . .	2	6	3	-	-	11
Saleswomen, . . . . .	6	4	-	-	-	10
Seamstresses, . . . . .	5	27	9	3	13	57
Sewing-machine operators, . . .	1	4	1	-	1	7
Shirt makers, . . . . .	6	3	1	-	1	11
Tailloresses, . . . . .	32	52	6	1	22	113
Waitresses, . . . . .	1	7	-	-	-	8
Not given, . . . . .	-	6	-	-	28	34
Other occupations, . . . . .	34	53	19	2	38	151
TOTALS, . . . . .	126	270	51	11	134	592

The largest number in any single occupation is found under the head of "tailloresses," who number 113 in the aggregate, 32 being under 21 years of age. The dressmakers numbered 74, the seamstresses 57, while 65 applicants were housewives, and 32 others were engaged in housework.

The following table classifies the occupations as shop work, home work, and domestic and personal service :



CLASSIFICATION.	NATIVE BORN				FOREIGN BORN	
	WEEKLY EARNINGS		VALUE OF WORK-RELIEF		WEEKLY EARNINGS	
	Number Reporting	Average	Number Supplied	Average	Number Reporting	Average
1 Shop work, . . .	89	\$5.34	98	\$15.09	95	\$5.41
2 Home work, . . .	8	5.09	24	20.01	11	5.57
3 Domestic and personal service, . . .	7	5.43	8	16.55	13	4.08
4 Not given, . . .	5	5.80	5	10.05	8	5.97
5 TOTALS, . . .	109	\$5.40	130	\$16.33	127	\$5.32

This table also shows the average weekly earnings under each classified occupation head, as reported by the applicants, and presents a classification with respect to each of the items included in the table under the head of native born, foreign born, and birthplace not given, with aggregates.

The average amount of work-relief furnished to the persons previously engaged in shop work was \$15.11, while those who had been engaged in work at home received \$17.05, and the persons previously engaged in domestic and personal service, \$14.69. The grand average amount of work-relief supplied to all applicants in the aggregate was \$14.93; while the grand average weekly wage previously earned by the applicants, in

CLASSIFIED VALUE OF WORK-RELIEF.	SHOP WORK				HOME WORK			
	Native Born	Foreign Born	Birth-place not Given	Totals	Native Born	Foreign Born	Birth-place not Given	Totals
1 Under \$2, . . .	4	7	4	15	2	1	2	5
2 \$3 but under \$6, . . .	9	7	2	18	2	1	2	5
3 \$6 but under \$9, . . .	17	14	3	34	1	4	5	10
4 \$9 but under \$12, . . .	12	13	2	27	5	6	-	11
5 \$12 but under \$15, . . .	7	2	2	11	1	4	-	5
6 \$15 but under \$18, . . .	12	12	-	24	-	5	-	5
7 \$18 and over, . . .	32	30	-	62	13	21	1	35
8 TOTALS, . . .	93	85	18	191	24	42	10	76

The persons furnished with work at the smaller work-rooms were, with few exceptions, paid a uniform rate of 75 cents per day. In general, the operatives were worked on three-day shifts. Referring to the aggregates presented in the above table, it will

FOREIGN BORN		BIRTHPLACE NOT GIVEN				AGGREGATES					
VALUE OF WORK-RELIEF		WEEKLY EARNINGS		VALUE OF WORK-RELIEF		WEEKLY EARNINGS		VALUE OF WORK-RELIEF			
Number Supplied	Average	Number Reporting	Average	Number Supplied	Average	Number Reporting	Average	Number Supplied	Average		
86	\$15.81	28	\$4.87	13	\$6.29	212	\$5.31	192	\$15.11	1	
41	17.81	8	6.67	10	6.88	22	5.76	75	17.06	2	
14	17.21	5	4.61	5	4.65	25	4.56	27	14.69	3	
6	15.44	15	4.97	19	6.17	28	5.40	80	8.67	4	
147	\$16.49	51	\$4.98	47	\$6.19	287	\$5.29	324	\$14.98	5	

the aggregate, was \$5.29. They therefore received an amount nearly equivalent to three weeks' wages at the rate of earnings previous to being thrown out of employment.

The proportion which the amount of work-relief furnished the different classes of workers shown in the table bears to average weekly earnings does not in most cases vary from the proportion which applies to all applicants in the aggregate. In some cases, however, it rises as high as four weeks' pay, and in others falls to about the amount previously earned in two weeks.

The next table shows the value of work-relief as classified under amounts varying from \$3 to \$18 and over.

DOMESTIC AND PERSONAL SERVICE				NOT GIVEN				AGGREGATES				
Na-tive Born	Foreign Born	Birth-place not Given	Totals	Na-tive Born	Foreign Born	Birth-place not Given	Totals	Na-tive Born	Foreign Born	Birth-place not Given	Totals	
-	3	1	4	-	1	7	8	6	12	14	32	1
-	-	2	2	1	1	4	6	12	9	10	31	2
1	-	2	3	3	-	5	8	22	18	15	55	3
2	3	-	5	-	1	-	1	19	23	2	44	4
1	-	-	1	-	-	1	1	9	6	3	18	5
-	2	-	2	-	-	-	-	12	19	-	31	6
4	6	-	10	1	3	2	6	50	60	3	113	7
8	14	5	27	5	6	19	30	130	147	47	324	8

be seen that 32 persons received work-relief amounting to less than \$3; 31 others received \$3 but under \$6; 55, \$6 but under \$9; 44, \$9 but under \$12; 18, \$12 but under \$15; 31, \$15 but under \$18; while 113 persons in the aggregate received work-

relief amounting to \$18 and over. Altogether, 191 persons who had previously been engaged in shop work, received work-relief at this room; 76 others who had been employed at home were aided; while the number who had previously been engaged in domestic and personal service was 27; the previous occupations of 30 persons who were aided, not being given.

The following table shows the number of applicants who had been registered by the Associated Charities, and who had received aid, furnished by charitable associations, institutions, etc., before applying for work-relief:

PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITU- TIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
<b>THE CITY OF BOSTON.</b>						
<i>Native Born.</i>	46	120	166	40	126	166
Aided by W. M.,* . . .	34	97	131	30	101	131
Not aided by W. M.,* . .	12	23	35	10	25	35
<i>Foreign Born.</i>	57	134	191	45	146	191
Aided by W. M., . . .	40	108	148	36	112	148
Not aided by W. M., . .	17	26	43	9	34	43

\* Wells Memorial.

	CLASSIFIED WEEKLY EARNINGS.	SHOP WORK				HOME WORK			
		Native Born	Foreign Born	Birth- place not Given	Totals	Native Born	Foreign Born	Birth- place not Given	Totals
1	\$1 but under \$2, . . .	1	-	1	2	-	2	-	2
2	\$2 but under \$3, . . .	4	3	2	9	2	2	-	4
3	\$3 but under \$4, . . .	17	16	6	39	1	-	-	1
4	\$4 but under \$5, . . .	15	19	3	37	-	1	-	1
5	\$5 but under \$6, . . .	10	17	4	31	2	2	-	4
6	\$6 but under \$7, . . .	18	19	3	40	-	-	-	-
7	\$7 but under \$8, . . .	12	8	5	25	1	-	2	3
8	\$8 but under \$9, . . .	9	6	-	15	-	1	-	1
9	\$9 but under \$10, . . .	2	5	-	7	-	-	-	-
10	\$10 and over, . . .	1	2	1	4	2	3	-	5
11	TOTALS, . . .	89	95	25	209	8	11	2	21

PLACE OF BIRTH.	ASSOCIATED CHARITIES			AID FURNISHED BY ASSOCIATIONS, INSTITU- TIONS, ETC.		
	Record	No Record	Totals	Number Aided	Number not Aided	Totals
THE CITY OF BOSTON — Con.						
Birthplace not Given.	59	176	235	36	199	235
Aided by W. M.,* . . .	12	41	53	7	46	53
Not aided by W. M.,* . .	47	135	182	29	153	182
Aggregates.	162	490	652	121	471	592
Aided by W. M., . . .	86	246	332	73	259	332
Not aided by W. M., . .	76	184	260	48	212	260

\* Wells Memorial.

In this table the applicants are classified with respect to place of birth. In the aggregate, 162 of the applicants are registered upon books of the Associated Charities; of these, 86 received work-relief at the Wells Memorial. The number who had received previous charity-relief was 121, and of these 73 received work-relief. By far the larger number had never received previous aid before applying for work-relief.

The classified weekly earnings of the applicants are shown in the next table, beginning on page 212.

DOMESTIC AND PERSONAL SERVICE				NOT GIVEN				AGGREGATES			
Na- tive Born	Foreign Born	Birch- place not Given	Totals	Na- tive Born	Foreign Born	Birch- place not Given	Totals	Na- tive Born	Foreign Born	Birch- place not Given	Totals
1	-	-	1	-	-	2	2	2	2	3	7
1	5	-	6	2	-	3	5	9	10	5	24
-	2	3	5	-	1	3	4	18	19	12	49
-	2	1	3	-	-	1	1	15	23	5	42
2	2	-	4	-	3	3	6	14	24	7	45
1	-	-	1	2	1	3	6	21	20	6	47
-	1	-	1	-	1	1	2	13	10	8	31
1	-	-	1	-	2	2	4	10	9	2	21
-	1	1	2	-	-	-	-	2	6	1	9
1	-	-	1	1	-	1	2	5	5	2	12
7	13	5	25	5	8	19	32	109	127	51	287

Of the applicants in the aggregate, 122 had previously received less than \$5 per week, 87 of these applicants having been engaged in shop work.

The final table of this series relates to the subject of rent.

THE CITY, AND WARDS.	APPLICANTS				APPLICANTS REPORTING RENT PAID					
	Report- ing Rent Paid	Not Report- ing Rent Paid	Board- ing	Totals	Num- ber	Num- ber of Per- sons	Num- ber of Rooms	Total Monthly Rent Paid	AVERAGES	
									Monthly Rent per Room	Per- sons to a Room
THE CITY OF BOSTON.	306	209	77	592	306	1,129	833	\$2,182.48	\$2.82	1.36
Ward 1, .	-	5	1	6	-	-	-	-	-	-
Ward 2, .	2	2	2	6	2	16	10	20.42	2.04	1.00
Ward 3, .	5	-	-	5	5	23	21	60.50	2.88	1.10
Ward 4, .	-	1	2	3	-	-	-	-	-	-
Ward 5, .	4	2	3	9	4	15	9	35.25	3.92	1.67
Ward 6, .	6	4	1	11	6	39	17	70.33	4.14	2.29
Ward 7, .	7	6	3	16	7	32	18	61.00	3.39	1.78
Ward 8, .	11	4	7	22	11	50	23	142.26	5.08	1.79
Ward 9, .	7	5	2	14	7	25	19	98.42	5.18	1.32
Ward 10, .	5	1	1	7	5	11	8	54.90	6.87	1.38
Ward 11, .	20	11	8	39	20	87	55	275.67	5.01	1.58
Ward 12, .	54	18	5	77	54	136	101	467.02	4.63	1.35
Ward 13, .	24	12	6	42	24	124	83	232.67	2.80	1.49
Ward 14, .	8	7	3	18	8	30	30	69.00	2.30	1.00
Ward 15, .	9	7	-	16	9	35	35	91.83	2.62	1.00
Ward 16, .	55	46	11	112	55	188	142	570.25	4.02	1.32
Ward 17, .	32	24	7	63	32	116	77	307.84	3.99	1.51
Ward 18, .	11	6	3	20	11	23	19	89.90	4.73	1.21
Ward 19, .	10	8	4	31	19	71	57	217.15	3.81	1.25
Ward 20, .	12	8	4	24	12	52	45	144.41	3.21	1.16
Ward 21, .	5	3	2	10	5	11	17	57.66	3.89	0.65
Ward 22, .	3	4	1	8	3	17	12	30.75	2.56	1.42
Ward 23, .	5	4	1	10	5	17	18	58.65	3.26	0.94
Ward 24, .	2	4	-	6	2	11	12	27.00	2.25	0.92
Ward not spec- ified, . .	-	17	-	17	-	-	-	-	-	-

This table is presented by wards, but it is not necessary to analyze it in detail, as the results shown in it are substantially in line with those previously shown for the applicants at the Bedford street work-rooms; and the conclusions stated with respect to the rents reported by the persons who applied there, apply also to the facts brought out in this table.

The next series of tables relates to the work conducted at Berkeley Temple, the first presentation showing the number of applicants and the amount of work-relief, by wards.

THE CITY, AND WARDS.	Number of Applicants	WORK-RELIEF			Value of Work- Relief
		Number Supplied	Number not Supplied	Totals	
THE CITY OF BOSTON.	274	252	22	274	\$3,427.84
Ward 1, . . . . .	1	1	-	1	20.25
Ward 2, . . . . .	2	1	1	2	39.75
Ward 3, . . . . .	1	1	-	1	1.88
Ward 4, . . . . .	1	1	-	1	17.63
Ward 5, . . . . .	1	1	-	1	10.50
Ward 6, . . . . .	4	3	1	4	24.75
Ward 7, . . . . .	1	1	-	1	7.50
Ward 8, . . . . .	3	3	-	3	33.00
Ward 9, . . . . .	3	3	-	3	58.53
Ward 10, . . . . .	5	5	-	5	91.89
Ward 11, . . . . .	20	19	1	20	220.58
Ward 12, . . . . .	12	11	1	12	185.65
Ward 13, . . . . .	12	10	2	12	142.90
Ward 14, . . . . .	5	5	-	5	75.76
Ward 15, . . . . .	7	6	1	7	83.63
Ward 16, . . . . .	59	54	5	59	814.54
Ward 17, . . . . .	54	50	4	54	675.67
Ward 18, . . . . .	11	11	-	11	87.77
Ward 19, . . . . .	16	13	3	16	159.56
Ward 20, . . . . .	6	6	-	6	66.40
Ward 21, . . . . .	3	3	-	3	28.13
Ward 22, . . . . .	7	7	-	7	121.54
Ward 23, . . . . .	4	4	-	4	47.26
Ward 24, . . . . .	1	1	-	1	10.50
Ward not specified, . . . . .	35	32	3	35	402.32

As appears from the table, the number of applicants was 274, of whom 252 were supplied with work-relief amounting to \$3,427.84. As was found to be the case with respect to the other work-rooms, the largest amounts and largest number of applicants appear in connection with the crowded wards. The amount of \$814.54 was distributed to 59 applicants in ward 16. A larger proportion of the relief at this room went to applicants in ward 17 than appears at either of the other work-rooms, this being due, probably, to the location of the Berkeley Temple. The total number of applicants was 54 and they received work-relief amounting to \$675.67.

Returns as to the ages of the applicants showed that 38 were found in the period 14 to 19 years; 58 in the period 20 to 29; 50 in the period 30 to 39; 46 in the period 40 to 49; 31 in the period 50 to 59; while 5 applicants were above 60 years of age, the age of 46 applicants being unknown.

The occupations of applicants are shown in the following table, classified as to age periods:

OCCUPATIONS.	AGE PERIODS				Age Unknown	ALL AGES
	Under 21	21 but under 45	45 but under 60	60 and over		
Coat makers, . . . . .	-	1	-	-	-	1
Cooks, . . . . .	-	-	4	-	-	4
Dressmakers, . . . . .	3	15	1	1	1	21
Employés:						
Candy factory, . . . . .	1	1	-	-	-	2
Cordage factory, . . . . .	6	-	-	-	-	6
Restaurant, . . . . .	-	-	1	-	-	1
Housewives, . . . . .	1	17	3	-	-	21
Housework, . . . . .	2	10	6	-	1	19
Laundry work, . . . . .	-	6	-	-	-	6
Saleswomen, . . . . .	1	-	-	-	-	1
Seamstresses, . . . . .	3	19	15	-	1	38
Sewing-machine operators, . . . . .	-	2	1	-	-	3
Tailoresses, . . . . .	1	12	5	-	-	18
Waitresses, . . . . .	2	2	-	-	-	4
Not given, . . . . .	2	8	4	-	38	52
No occupation, . . . . .	3	6	1	-	-	10
Other occupations, . . . . .	18	26	13	5	5	67
TOTALS, . . . . .	43	125	54	6	46	274

The occupations of 52 applicants were not given; 10 were reported as having no occupation; seamstresses numbered 38; tailoresses, 18; dressmakers, 21; housewives, 21; and persons engaged in housework, 19. Here, as at the other rooms, the applicants are most numerous in occupations requiring a low degree of skill.

The occupations are classified in the following table, which also shows the average weekly earnings prior to being thrown out of employment, and the value of work-relief supplied:

CLASSIFICATION.	WEEKLY EARNINGS		VALUE OF WORK-RELIEF	
	Number Reporting	Average	Number Supplied	Average
Shop work, . . . . .	66	\$5.67	78	\$12.00
Home work, . . . . .	12	9.42	48	15.87
Domestic and personal service, . . . . .	19	4.20	42	13.03
Not given, . . . . .	3	7.67	84	13.52
TOTALS, . . . . .	100	\$5.90	252	\$13.00

The number of applicants reporting their previous rate of wages is 100, the average wages being \$5.90, varying from \$4.20 for those engaged in domestic and personal service to \$9.42 reported as earned by those who worked at home. The average amount of work-relief supplied was \$13.60, or a sum nearly equivalent to three weeks' wages at the average rate reported. This proportion is not quite maintained in each of the classes of occupations, the persons who had previously been engaged in home work receiving work-relief to an amount less than two weeks' wages at the average rate reported.

The amount of work-relief, as classified in sums ranging from \$3 to \$18, is shown in the next table.

CLASSIFIED VALUE OF WORK-RELIEF.	Shop Work	Home Work	Domestic and Personal Service	Not Given	Totals
Under \$3 . . . . .	14	4	3	22	43
\$3 but under \$6, . . . . .	6	4	9	9	28
\$6 but under \$9, . . . . .	9	4	3	8	24
\$9 but under \$12, . . . . .	12	9	4	10	35
\$12 but under \$15, . . . . .	4	8	4	6	22
\$15 but under \$18, . . . . .	10	2	3	7	22
\$18 and over, . . . . .	23	17	16	22	78
TOTALS, . . . . .	78	48	42	84	252

From the final column of this table, it is seen that 43 persons received work-relief amounting to less than \$3; 28, \$3 but under \$6; 24, \$6 but under \$9; 35, \$9 but under \$12; 22, \$12 but under \$15; 22, \$15 but under \$18; while 78 received work-relief amounting to \$18 and over.

The weekly earnings of the applicants, as classified under the system employed in the preceding tables, is shown in the following presentation :

CLASSIFIED WEEKLY EARNINGS.	Shop Work	Home Work	Domestic and Personal Service	Not Given	Totals
\$1 but under \$2, . . . . .	1	1	1	-	3
\$2 but under \$3, . . . . .	4	-	1	-	5
\$3 but under \$4, . . . . .	8	-	6	-	14
\$4 but under \$5, . . . . .	11	-	5	-	16



CLASSIFIED WEEKLY EARNINGS.	Shop Work	Home Work	Domestic and Personal Service	Not Given	Totals
\$5 but under \$6, . . . . .	13	1	3	-	17
\$6 but under \$7, . . . . .	12	1	1	-	14
\$7 but under \$8, . . . . .	8	2	-	1	11
\$8 but under \$9, . . . . .	1	3	2	2	8
\$9 but under \$10, . . . . .	1	2	-	-	3
\$10 and over, . . . . .	7	2	-	-	9
TOTALS, . . . . .	66	12	19	3	100

Of the applicants in the aggregate, 38 reported their previous weekly earnings as less than \$5, while only 45 had received a weekly wage amounting to more than \$6.

The final series of tables relates to the work conducted at 117 Berkeley street. The first table shows the number of applicants and the amount of work-relief by wards.

THE CITY, AND WARDS.	CONJUGAL CONDITION OF APPLICANTS					WORK-RELIEF	
	Single	Married	Wid- owed	Not Given	Totals	Number Supplied	Value
THE CITY OF BOSTON.	59	32	17	67	175	175	\$1,800.23
Ward 1, . . . . .	1	-	-	-	1	1	18.00
Ward 2, . . . . .	1	1	-	-	2	2	24.78
Ward 3, . . . . .	-	-	1	1	2	2	7.50
Ward 4, . . . . .	1	1	-	-	2	2	18.00
Ward 5, . . . . .	-	-	2	-	2	2	25.50
Ward 6, . . . . .	-	-	-	2	2	2	38.75
Ward 7, . . . . .	3	1	-	4	8	8	66.79
Ward 8, . . . . .	3	-	1	2	6	6	33.75
Ward 9, . . . . .	1	-	1	1	3	3	21.00
Ward 11, . . . . .	4	1	-	2	7	7	81.08
Ward 12, . . . . .	6	2	1	8	17	17	163.70
Ward 13, . . . . .	4	6	2	3	15	15	194.79
Ward 14, . . . . .	5	4	-	1	10	10	94.43
Ward 15, . . . . .	2	5	-	2	9	9	74.70
Ward 16, . . . . .	5	4	2	8	19	19	177.92
Ward 17, . . . . .	6	1	2	7	16	16	184.90
Ward 18, . . . . .	5	1	-	2	8	8	99.90
Ward 19, . . . . .	4	2	-	4	10	10	128.63
Ward 20, . . . . .	4	1	1	5	11	11	115.40
Ward 21, . . . . .	2	-	1	-	3	3	32.65
Ward 22, . . . . .	-	-	2	3	5	5	50.00
Ward 23, . . . . .	-	1	1	2	4	4	52.88
Ward not specified, . . .	2	1	-	10	13	13	104.23

In this table, the applicants are classed according to conjugal condition. In the aggregate, 175 persons were supplied with work amounting to \$1,809.28. Of these, 59 were single, 32 married, 17 widowed, while the conjugal condition of 67 is not given. The largest numbers of applicants, as well as the largest amounts disbursed in work-relief, are found in wards 12, 13, 16, 17, 19, and 20.

The length of time the applicant had resided in Boston was ascertained at this work-room, and is shown in the following table :

LENGTH OF TIME IN BOSTON.	Number of Applicants	LENGTH OF TIME IN BOSTON.	Number of Applicants
5 months, . . . . .	1	18 years, . . . . .	2
6 months, . . . . .	2	19 years, . . . . .	3
7 months, . . . . .	1	20 years, . . . . .	2
9 months, . . . . .	1	21 years, . . . . .	4
15 months, . . . . .	1	22 years, . . . . .	3
18 months, . . . . .	1	23 years, . . . . .	2
1 year, . . . . .	1	24 years, . . . . .	2
2 years, . . . . .	7	25 years, . . . . .	1
3 years, . . . . .	4	27 years, . . . . .	2
4 years, . . . . .	3	30 years, . . . . .	2
5 years, . . . . .	1	33 years, . . . . .	1
6 years, . . . . .	3	35 years, . . . . .	2
7 years, . . . . .	6	38 years, . . . . .	2
8 years, . . . . .	3	47 years, . . . . .	1
9 years, . . . . .	1	50 years, . . . . .	1
10 years, . . . . .	4	55 years, . . . . .	2
12 years, . . . . .	6	61 years, . . . . .	1
13 years, . . . . .	2	Always, . . . . .	7
14 years, . . . . .	2	Since childhood, . . . . .	1
15 years, . . . . .	3	Not given, . . . . .	70
16 years, . . . . .	3	TOTALS, . . . . .	175
17 years, . . . . .	4		

From the data presented in the above table, it will be noted that most of the applicants had resided in Boston more than one year. Only five out of 175 report a shorter term of residence. This is in line with the information secured at the Court House, and shows that the majority of the applicants were not recent accessions to the population of the city.

Of the applicants at this work-room, 34 were found in the age period 14 to 19 years, 33 in the period 20 to 29, 13 in the period

30 to 39, 18 in the period 40 to 49, 12 in the period 50 to 59, while 4 were above 60 years of age. The ages of 61 applicants were not ascertained.

The previous occupations of the applicants are shown in the following table :

OCCUPATIONS.	AGE PERIODS				Age Unknown	ALL AGES
	Under 21	21 but under 45	45 but under 60	60 and over		
Dressmakers, . . . . .	1	5	-	1	2	9
Employés (candy factory), . . . . .	2	1	-	-	-	3
Housewives, . . . . .	-	6	-	-	3	9
Housework, . . . . .	1	4	1	-	-	6
Saleswomen, . . . . .	5	-	-	-	-	5
Seamstresses, . . . . .	4	13	4	1	10	32
Tailoresses, . . . . .	-	5	3	-	-	8
Not given, . . . . .	3	10	3	1	41	68
Other occupations, . . . . .	17	9	3	1	5	35
TOTALS, . . . . .	38	53	19	4	61	175

The occupations of 68 applicants are not given. Of the others, 32 were reported to be seamstresses, eight tailoresses, nine dressmakers, while 15 others were housewives and those engaged in housework. The conclusion as to the low degree of skill, shown among the applicants, brought out in the tables relating to the other work-rooms, is supported here.

The first table, on page 221, shows the means of support relied upon by the applicants during their period of unemployment.

OCCUPATIONS.	APPLICANTS HAVING OTHER WAGE EARNERS IN FAMILY			
	Number of Applicants	Number of Other Wage Earners	Totals	Number of Dependents
1 Dressmakers, . . . . .	5	3	13	5
2 Employés (candy factory), . . . . .	3	7	10	3
3 Housewives, . . . . .	5	6	11	13
4 Housework, . . . . .	3	3	6	7
5 Saleswomen, . . . . .	4	7	11	11
6 Seamstresses, . . . . .	10	13	23	14
7 Tailoresses, . . . . .	3	6	9	4
8 Not given, . . . . .	6	9	15	3
9 Other occupations, . . . . .	22	33	60	41
10 TOTALS, . . . . .	61	102	163	111

MEANS OF SUPPORT DURING PERIOD OF UNEMPLOYMENT.	SINGLE		MARRIED		WIDOWED AND NOT GIVEN		AGGREGATES	
	Number of Ap- plicants	Number of Depend- ents	Number of Ap- plicants	Number of Depend- ents	Number of Ap- plicants	Number of Depend- ents	Number of Ap- plicants	Number of Depend- ents
THE CITY OF BOSTON.	50	94	32	50	84	64	175	208
Earnings, . . . .	1	1	-	-	1	-	2	1
Earnings (brother), .	3	4	-	-	-	-	3	4
Earnings (father), .	2	3	-	-	-	-	2	3
Earnings (husband), .	-	-	1	-	-	-	1	-
Earnings (mother), .	1	1	-	-	-	-	1	1
Help (aunt), . . . .	1	-	-	-	-	-	1	-
Help (brother), . . .	1	5	-	-	1	3	2	3
Help (friend), . . . .	2	1	2	3	-	-	4	4
Help (sister), . . . .	1	4	-	-	-	-	1	4
No assistance, . . . .	9	13	-	-	2	3	11	16
Odd jobs, . . . . .	5	3	-	-	-	-	5	3
Savings, . . . . .	2	5	2	1	2	-	6	6
Not given, . . . . .	31	49	27	46	78	58	136	153

This table is classified so as to show the conjugal condition of the persons to whom it relates. The information, however, is not very satisfactory. In the aggregate, 136 persons out of 175 did not report their means of support during the period of unemployment. Of the others, 11 had no assistance; while those who had assistance relied in the main upon the help of relatives or the earnings of other members of the family.

The next table, beginning on page 220, shows the number of applicants, under each occupation head, who had other wage earners in the family to which they belonged, and the number who had not such wage earners, with aggregates.

APPLICANTS NOT HAVING OTHER WAGE EARNERS IN FAMILY		AGGREGATES				
Number of Applicants	Number of Dependents	Number of Applicants	Number of Other Wage Earners	Total of Appli- cants and Wage Earners	Number of Dependents	Total Number of Persons
4	5	9	3	17	10	27
-	-	3	7	10	8	18
4	10	9	6	15	23	38
3	3	6	3	9	10	19
1	2	5	7	12	13	25
22	23	32	13	50	37	87
5	7	8	6	14	11	25
62	23	68	9	77	36	113
13	19	35	33	73	60	133
114	97	175	102	277	208	485

Referring to the final line of the table, it will be seen that 61 applicants had other wage earners in the family, the total number of dependents upon the family earnings being 111. The applicants not having other wage earners in the family numbered 114, the number of dependents being 97 in the aggregate; and, 175 applicants being considered, the number of other wage earners in the families to which they belonged was 102, the total number of applicants and wage earners 277, and the number of dependents 208, resulting in a grand total of 485 persons who were connected with the families to which applicants for work at this work-room belonged.

The final table shows the length of time out of employment, as returned by the applicants, and whether or not they were able to obtain any work, after being thrown out of their regular employment, before applying for work-relief.

OCCUPATIONS, AND LENGTH OF TIME OUT OF EMPLOYMENT.	ODD JOBS SINCE OUT OF EMPLOYMENT		Not Stated as to Whether having had any Work since out of Regu- lar Employ- ment	Total Number of Applicants
	Number of Persons	Amount of Work-Relief		
Dressmakers, . . . . .	2	\$27.00	7	9
1 month or less, . . . . .	1	20.25	1	2
1½ months, . . . . .	-	-	1	1
2 months, . . . . .	1	6.75	1	2
2½ months, . . . . .	-	-	1	1
6 months, . . . . .	-	-	1	1
7 months, . . . . .	-	-	1	1
Not given, . . . . .	-	-	1	1
Employés (candy factory), . . . . .	2	13.15	1	3
2 months, . . . . .	1	6.75	-	1
5 months, . . . . .	-	-	1	1
Not given, . . . . .	1	6.39	-	1
Housewives, . . . . .	3	44.00	6	9
Not given, . . . . .	3	44.00	6	9
Housework, . . . . .	2	23.90	4	6
1 month or less, . . . . .	-	-	1	1
2 months, . . . . .	-	-	1	1
6½ months, . . . . .	1	5.00	-	1
Not given, . . . . .	1	18.00	2	3
Saleswomen, . . . . .	1	15.75	4	5
1 month or less, . . . . .	-	-	3	3
1½ months, . . . . .	1	15.75	-	1
Not given, . . . . .	-	-	1	1
Seamstresses, . . . . .	8	95.70	24	32
1 month or less, . . . . .	1	5.25	5	6
1½ months, . . . . .	-	-	1	1
3 months, . . . . .	-	-	2	2

OCCUPATIONS, AND LENGTH OF TIME OUT OF EMPLOYMENT.	ODD JOBS SINCE OUT OF EMPLOYMENT		Not Stated as to Whether having had any Work since out of Regu- lar Employ- ment	Total Number of Applicants
	Number of Persons	Amount of Work-Relief		
<b>Seamstresses — Con.</b>				
3½ months, . . . . .	1	\$8.25	-	1
4 months, . . . . .	1	18.75	-	1
4½ months, . . . . .	-	-	1	1
5 months, . . . . .	1	21.00	-	1
6 months, . . . . .	-	-	1	1
7 months, . . . . .	1	6.75	1	2
7½ months, . . . . .	-	-	1	1
9 months, . . . . .	-	-	1	1
12 months, . . . . .	-	-	1	1
22 months, . . . . .	-	-	1	1
Not given, . . . . .	8	35.70	9	12
<b>Tailresses, . . . . .</b>	6	71.51	8	8
2 months, . . . . .	2	12.25	-	2
3 months, . . . . .	-	-	1	1
4 months, . . . . .	1	16.50	1	2
5 months, . . . . .	1	24.75	-	1
6 months, . . . . .	1	18.00	-	1
Not given, . . . . .	-	-	1	1
Not given, . . . . .	-	-	68	68
1 month or less, . . . . .	-	-	1	1
6 months, . . . . .	-	-	1	1
Not given, . . . . .	-	-	66	66
<b>Other occupations, . . . . .</b>	8	78.85	27	25
1 month or less, . . . . .	1	1.50	10	11
2 months, . . . . .	-	-	1	1
3 months, . . . . .	-	-	4	4
5 months, . . . . .	1	1.50	2	3
6 months, . . . . .	1	10.15	1	2
7 months, . . . . .	1	6.40	1	2
8 months, . . . . .	1	15.00	1	2
9 months, . . . . .	1	25.15	-	1
12 months, . . . . .	1	1.50	-	1
24 months, . . . . .	-	-	1	1
Not given, . . . . .	1	17.65	6	7

It is not necessary to analyze the above table in detail. Referring to the occupation in which the applicants at this work-room were most numerous, namely, seamstresses, it will be seen that eight were able to obtain odd jobs after leaving their regular employment, while 24 reported no work after being thrown out. One seamstress who had been out of regular employment one month or less, received work-relief to the amount of \$5.25; one who had been out of employment 3½ months received \$8.25, another who had been out four months

received \$18.75, another who had been out five months received \$21, while one who had been out seven months received \$6.75.

The conclusions which may be drawn from these figures apply in the main to the other occupations included in the table, and are in line with the conclusions drawn from similar information respecting the men who were given work at the Court House, which have previously been summarized ; the most striking fact, of course, being the small amount of work-relief which it was possible to afford, as compared with the length of time which the applicants had been out of employment.

### AGRICULTURAL LABOR IN CONNECTION WITH UNEMPLOYMENT.

In connection with the problem of unemployment in cities, it has sometimes been suggested that possibly some method could be adopted whereby the surplus labor in crowded localities might be transferred to the country, and utilized in agriculture. It has also been suggested that the opening of free registry offices in cities and large towns might be a simple and efficient means of effecting this transfer and thus enable farmers to secure the help which, in certain seasons at least, they need.

In order that the fullest information available might be obtained as to the state of the labor market in agricultural districts, and as to whether a system of free employment registries would operate in the way suggested, the Bureau has secured testimony from 1,021 employers of agricultural labor, representing all the agricultural districts and nearly every town in the Commonwealth, the cities, of course, being omitted. The employers who have replied to the inquiries of the Bureau are distributed by counties, as follows :

COUNTIES.	Employers	COUNTIES.	Employers
Barnstable, . . . . .	52	Middlesex, . . . . .	129
Berkshire, . . . . .	122	Nantucket, . . . . .	3
Bristol, . . . . .	58	Norfolk, . . . . .	51
Dukes, . . . . .	15	Plymouth, . . . . .	58
Essex, . . . . .	106	Suffolk, . . . . .	2
Franklin, . . . . .	122	Worcester, . . . . .	138
Hampden, . . . . .	59	TOTALS, . . . . .	1,021
Hampshire, . . . . .	107		

Every town in the Commonwealth is represented except the following—Barnstable County : Harwich, Provincetown ; Berkshire County : Lanesborough, New Ashford ; Bristol County : Rehoboth ; Dukes County : Gay Head ; Essex County : Nahant, Topsfield ; Hampden County : Blandford, Chester ; Norfolk County : Dedham, Norwood, Randolph ; Plymouth County : Hull, Norwell, Bridgewater ; Suffolk County : Winthrop ; Worcester County : Ashburnham, Blackstone, North Brookfield.

The omissions, indicated in the above list, do not affect the general conclusions to be drawn from the replies, and the returns may, therefore, be accepted as reflecting the conditions existing throughout the Commonwealth ; as some of the towns from which no reports were received, are of little importance as agricultural towns, and as to the others the conditions shown in adjacent towns are sufficiently indicative.

The first question asked was the following : “ Is the demand for agricultural labor in your town apt to be in excess of the actual supply ? ” The following table summarizes the answers by counties :

COUNTIES.	AFFIRMATIVE			NEGATIVE		
	Yes	At Certain Seasons	Yes (Females only)	No	Supply Equals Demand	Unanswered
Barnstable, . . . . .	18	7	1	22	4	-
Berkshire, . . . . .	71	7	1	37	4	2
Bristol, . . . . .	25	4	-	23	5	1
Dukes, . . . . .	6	2	-	7	-	-
Essex, . . . . .	46	2	-	53	2	2
Franklin, . . . . .	66	4	1	47	3	1
Hampden, . . . . .	28	-	4	25	2	-
Hampshire, . . . . .	60	3	1	41	1	1
Middlesex, . . . . .	73	9	-	46	-	1
Nantucket, . . . . .	3	-	-	-	-	-
Norfolk, . . . . .	31	1	-	17	-	2
Plymouth, . . . . .	30	4	1	21	1	1
Suffolk, . . . . .	1	-	-	1	-	-
Worcester, . . . . .	69	2	2	61	1	3
TOTALS, . . . . .	527	45	11	401	23	14

In analyzing this table, we may first point out that 527 replies are unqualifiedly in the affirmative ; that is, the demand for agricultural labor, as indicated by these replies, is in excess



of the supply. Of the others, 45 replied yes, at certain seasons; and 11 replied yes, as to female labor. On the other hand, 401 replies are in the negative, indicating that the demand in the opinion of the respondents is not in excess of the supply, 23 others answer that the supply equals the demand, and 14 left the question unanswered. Referring to the counties in detail, and comparing the replies which were unqualifiedly in the affirmative or in the negative, it will be seen that in Barnstable County the negative replies are slightly more numerous than the affirmative; in Berkshire County, the affirmative replies outnumber the negative nearly two to one; in Bristol County, the affirmative replies are very slightly in excess; in Dukes County, which is not largely engaged in agriculture, the replies nearly balance each other, the negative having one in excess. In Essex County the negative replies are in excess, while in Franklin County the affirmative replies lead. In Hampden County the affirmative replies are slightly in excess. In Hampshire County the affirmative replies largely outnumber the negative; in Middlesex County, also, this is true; in Nantucket County there are no negative replies; in Norfolk County the affirmative replies are nearly two to one; in Plymouth County they are about one-third more numerous than the negative replies; in

	COUNTIES.	Spring	Summer	Autumn	Winter	Spring and Summer
1	Barnstable, . . . . .	1	9	8	-	2
2	Berkshire, . . . . .	1	52	-	-	12
3	Bristol, . . . . .	5	18	2	-	7
4	Dukes, . . . . .	1	4	-	-	1
5	Essex, . . . . .	6	32	-	1	20
6	Franklin, . . . . .	5	43	2	-	17
7	Hampden, . . . . .	-	20	-	-	10
8	Hampshire, . . . . .	4	43	-	2	15
9	Middlesex, . . . . .	4	43	1	-	19
10	Nantucket, . . . . .	-	-	-	-	-
11	Norfolk, . . . . .	2	17	-	-	15
12	Plymouth, . . . . .	-	16	2	-	12
13	Suffolk, . . . . .	-	2	-	-	-
14	Worcester, . . . . .	5	37	1	-	32
15	TOTALS, . . . . .	34	336	16	3	162

The largest number of replies, 336, state that the dearth of labor, when it occurs, is most marked in the Summer; 162 others

Suffolk County, which is, of course, of small account in an inquiry of this kind, one affirmative and one negative answer was received; and in Worcester County the affirmative replies numbered 69 and the negative 61.

On the basis of the statistics contained in this table, it would seem that opinion in the towns represented is about equally divided on the question; and that, while the affirmative replies are considerably in excess of the negative, still it frequently happens that if individuals are consulted in the same town, some will report no difficulty in getting the number of employes they need, while others, perhaps for the reason that they employ a larger number, or possibly because they are more critical as to the qualifications of those whom they employ, or for various other reasons, give a contrary reply. Disregarding the question of balance between the affirmative and negative answers, it is sufficiently clear that in a very large number of cases, distributed over the different counties, the demand for agricultural labor is in excess of the supply.

The second question asked was: "If the demand is in excess of the supply, in what month or months is the lack of supply most marked?" Replies to this question are tabulated as follows:

Spring and Autumn	Spring and Winter	Spring, Summer, and Autumn	Spring, Summer, and Winter	Summer and Autumn	Summer and Winter	Autumn and Winter	Spring, Summer, Autumn, and Winter	No Lack	Unanswered	TOTALS	
1	-	2	-	6	-	-	-	21	2	52	1
-	-	26	-	6	-	-	2	17	6	122	2
-	-	4	-	-	-	-	2	14	6	58	3
-	-	1	-	-	-	-	1	5	2	15	4
1	1	11	-	5	-	1	-	19	8	105	5
-	-	27	-	10	-	-	-	11	7	122	6
-	-	11	-	5	-	-	1	7	5	59	7
1	-	14	-	7	1	-	-	16	4	107	8
-	-	20	1	12	-	-	8	16	5	129	9
-	-	2	-	1	-	-	-	-	-	3	10
1	-	4	-	1	-	-	-	8	3	51	11
-	-	8	-	-	-	-	2	12	6	58	12
-	-	-	-	-	-	-	-	-	-	2	13
1	-	22	-	2	-	-	5	33	-	138	14
5	1	152	1	55	1	1	21	179	54	1,021	15

reply in the Spring and Summer; and 152 answer Spring, Summer, and Autumn. In 34 replies, Spring is indicated as the

season in which the lack of supply is most marked ; while 55 indicate the Summer and Autumn. Only three report a lack of supply in the Winter, and only 16 in the Autumn. Only five replied Spring and Autumn, while there are a few which indicate the Winter in connection with some other season, and 21 report a lack during the entire year.

The conclusion drawn from the above figures is that the lack is most marked during the summer months, but that during the Spring, Summer, and Autumn months there is a considerable demand which is apt to be in excess of the supply ; although it will be seen that 179 of the replies indicated no lack of supply at any season. These replies do not quite correspond with the answers to the previous question, as in some cases where no excess of demand over supply was reported, the respondent has indicated certain seasons as those in which the lack of supply is most likely to occur, if at all. Of those who responded to the inquiries of the Bureau, 54 left this particular question unanswered.

The next inquiry was : "Is the lack of supply apt to be in male labor, in female labor, or in both?" The answers are contained in the following table :

COUNTIES.	Males	Females	Both Sexes	Un-answered	No Lack	Totals
Barnstable, . . . . .	10	6	17	2	17	52
Berkshire, . . . . .	17	23	67	6	9	122
Bristol, . . . . .	8	12	18	3	17	58
Dukes, . . . . .	2	-	6	2	5	15
Essex, . . . . .	27	16	43	3	16	105
Franklin, . . . . .	8	27	72	3	12	122
Hampden, . . . . .	11	10	29	1	8	69
Hampshire, . . . . .	21	22	55	1	8	107
Middlesex, . . . . .	27	11	71	1	19	129
Nantucket, . . . . .	1	-	2	-	-	3
Norfolk, . . . . .	10	3	27	2	9	51
Plymouth, . . . . .	13	3	25	5	12	65
Suffolk, . . . . .	2	-	-	-	-	2
Worcester, . . . . .	14	30	68	3	23	138
TOTALS, . . . . .	171	163	500	32	155	1,021

Referring to the line of totals, it will be seen that out of the 1,021 replies, 171 reported a lack of supply in male labor, 163 in female labor, while 500 indicate no difference as to the sexes

in this respect. The inquiry was left unanswered by 32 respondents, while 155 reported no lack of supply.

It may be concluded, therefore, that, as a rule, there is not much difference between the demand for male or female labor, although this is not universally true, as the conditions in the different counties are dissimilar in this respect. In every county, however, the number of replies indicating no difference in the lack of supply between the sexes is in excess of the number indicating such a difference.

The fourth question, the replies to which are presented in the following table, related to the number of males and females employed by the respondents :

COUNTIES.	NUMBER OF EMPLOYES			NUMBER DIFFICULT TO OBTAIN		
	Males	Females	Totals	Males	Females	Totals
Barnstable, . . . .	427	357	784	68	46	114
Berkshire, . . . .	755	296	1,051	173	77	250
Bristol, . . . . .	388	137	525	43	29	72
Dukes, . . . . .	30	7	37	7	4	11
Essex, . . . . .	602	125	727	91	18	109
Franklin, . . . . .	705	236	941	192	82	274
Hampden, . . . . .	463	123	586	97	29	126
Hampshire, . . . .	460	95	555	134	54	188
Middlesex, . . . .	1,064	186	1,250	175	55	230
Nantucket, . . . .	10	1	11	4	1	5
Norfolk, . . . . .	271	38	309	53	11	64
Plymouth, . . . .	378	126	504	57	13	70
Suffolk, . . . . .	37	16	53	6	-	6
Worcester, . . . .	625	195	820	139	70	209
TOTALS, . . . . .	6,235	1,938	8,173	1,239	489	1,728

The total number of persons employed by those who replied to the questions of the Bureau was 8,173 ; 6,235 being males and 1,938 females. The number of each sex which the employers found it difficult to obtain is said to be, with respect to the males, 1,239, and with respect to the females, 489, or 1,728 persons out of the grand total. These figures indicate the representative character of the replies to the questions, as they evidently cover the conditions surrounding a considerable number of employes ; and they also indicate, so far as it can be done statistically, the excess of demand over supply. This is shown by counties. For instance, referring to total figures only, the respondents employed 784 persons in Barnstable

County, of whom they found it difficult to obtain 114. In Berkshire County 1,051 persons were employed, 250 being difficult to obtain.

Without referring in detail to the other counties, we present the following analysis table of percentages, showing clearly the ratio between the total number of employes and the number difficult to obtain in each of the counties :

COUNTIES.	Total Number of Employes	Number Difficult to Ob- tain	Percentages of Number Diffi- cult to Obtain of Total Number Employed
Barnstable, . . . . .	784	114	14.54
Berkshire, . . . . .	1,051	250	23.79
Bristol, . . . . .	526	72	13.71
Dukes, . . . . .	37	11	29.73
Essex, . . . . .	727	109	14.99
Franklin, . . . . .	941	274	29.12
Hampden, . . . . .	586	126	21.50
Hampshire, . . . . .	555	188	33.87
Middlesex, . . . . .	1,270	230	18.11
Nantucket, . . . . .	11	5	45.45
Norfolk, . . . . .	309	64	20.71
Plymouth, . . . . .	504	70	13.89
Suffolk, . . . . .	53	6	11.32
Worcester, . . . . .	820	209	25.49
TOTALS, . . . . .	8,173	1,728	21.14

The percentage of number difficult to obtain of total number employed in the State at large is 21.14. In seven counties, we find a percentage indicating the proportion difficult to obtain of total number employed smaller than this percentage for the State at large, these counties being as follows, the percentages difficult to obtain being annexed in each case: Barnstable, 14.54; Bristol, 13.71; Essex, 14.99; Middlesex, 18.11; Norfolk, 20.71; Plymouth, 13.89; and Suffolk, 11.32. These counties are all in the eastern part of the State and include the most populous districts. On the other hand, seven counties, including all the remote and sparsely populated districts, report a percentage difficult to obtain larger than the percentage for the State. These counties, with the percentages annexed, are: Berkshire, 23.79; Dukes, 29.73; Franklin, 29.12; Hampden, 21.50; Hampshire, 33.87; Nantucket, 45.45; and Worcester, 25.49. Of these last named counties Nantucket and Dukes

County are not important in agriculture, and may be disregarded. The others include most of the distinctively rural parts of the State.

Accepting the percentages as indicative, it would seem that the difficulty of obtaining agricultural labor increases in proportion to the remoteness and distinctively agricultural character of the locality. In Berkshire County, for instance, the percentage indicates that it is difficult to obtain nearly one-fourth of the total number required, in Franklin County the proportion rises to nearly one-third, and in Hampshire County slightly exceeds one-third. On the other hand, in Worcester County the proportion is in excess of one-fourth, while in Essex County, which contains prosperous farming districts but also many populous towns and cities, the proportion of help difficult to obtain drops to 14.99 per cent. In Middlesex County, where somewhat similar conditions are found, the proportion is but 18.11, while in Barnstable, Bristol, and Plymouth counties, also, small percentages appear.

The respondents were also asked the following question: "What are the wages per month in your locality for agricultural labor?" The replies indicated a considerable variation in wages which, however, have been brought under classification in the following series of tables, the first of which relates to the monthly wages, without board, for males:

COUNTIES.	NUMBER OF TOWNS REPORTING SPECIFIED MONTHLY WAGES (WITHOUT BOARD) FOR MALES					Totals
	\$10 but under \$20	\$20 but under \$30	\$30 but under \$40	\$40 but under \$50	Over \$50	
Barnstable, . . . . .	-	-	6	7	-	13
Berkshire, . . . . .	-	8	14	2	-	24
Bristol, . . . . .	-	-	13	5	-	18
Dukes, . . . . .	-	4	2	1	-	7
Essex, . . . . .	1	1	13	9	1	25
Franklin, . . . . .	-	2	16	3	-	21
Hampden, . . . . .	-	3	9	5	-	17
Hampshire, . . . . .	-	1	15	8	2	26
Middlesex, . . . . .	-	1	22	8	3	34
Nantucket, . . . . .	-	-	2	-	-	2
Norfolk, . . . . .	-	-	9	8	1	18
Plymouth, . . . . .	-	1	11	7	1	20
Suffolk, . . . . .	-	-	-	-	-	-
Worcester, . . . . .	-	4	31	9	1	45
TOTALS, . . . . .	1	25	163	72	9	270

Referring simply to the final line of the table, the largest aggregation of towns will be found to be those wherein wages are reported as \$30 but under \$40 per month, without board; the total number reported in this class was 163. Taking the next most numerous classes, we find 25 towns wherein wages are reported as \$20 but under \$30, and 72 towns in which wages are \$40 but under \$50. In only nine instances are wages over \$50 reported. This, of course, is a very high wage for agricultural labor, and probably covers the services of foremen or specially skilled persons. At the other extremity of the scale, we find wages less than \$20 a month reported from only one town.

The next table presents the monthly wages, with board, for males.

COUNTIES.	NUMBER OF TOWNS REPORTING SPECIFIED MONTHLY WAGES (WITH BOARD) FOR MALES					Totals
	\$10 but under \$20	\$20 but under \$30	\$30 but under \$40	\$40 but under \$50	Over \$50	
Barnstable, . . . . .	5	4	8	-	-	12
Berkshire, . . . . .	16	12	2	-	-	30
Bristol, . . . . .	8	5	2	1	-	16
Dukes, . . . . .	5	1	-	-	-	6
Essex, . . . . .	4	21	2	-	-	27
Franklin, . . . . .	10	10	3	2	-	25
Hampden, . . . . .	8	9	-	-	-	17
Hampshire, . . . . .	5	14	1	2	-	22
Middlesex, . . . . .	18	23	3	-	-	44
Nantucket, . . . . .	-	-	1	-	-	1
Norfolk, . . . . .	4	16	1	-	-	21
Plymouth, . . . . .	10	12	1	1	-	24
Suffolk, . . . . .	-	1	-	-	-	1
Worcester, . . . . .	20	27	4	-	-	51
TOTALS, . . . . .	113	155	23	6	-	297

In this class, the largest aggregation of towns is found to be those wherein wages are \$20 but under \$30, with board, 155 such towns being reported. Of the others, 113 are reported in which wages are \$10 but under \$20; while in 23 towns the rate reported is \$30 but under \$40; and in six, \$40 but under \$50. This includes the entire number of towns from which wages, with board for males, were reported.

The next table presents the monthly wages for females, without board.

COUNTIES.	NUMBER OF TOWNS REPORTING SPECIFIED MONTHLY WAGES (WITHOUT BOARD) FOR FEMALES					
	\$10 but under \$20	\$20 but under \$30	\$30 but under \$40	\$40 but under \$50	Over \$50	Totals
Barnstable, . . . . .	-	8	1	-	-	9
Berkshire, . . . . .	8	13	8	-	-	19
Bristol, . . . . .	8	3	8	-	-	9
Dukes, . . . . .	-	2	-	-	-	2
Essex, . . . . .	-	4	7	-	-	11
Franklin, . . . . .	2	11	1	-	-	14
Hampden, . . . . .	1	6	2	-	-	9
Hampshire, . . . . .	2	11	1	-	-	14
Middlesex, . . . . .	1	17	2	-	-	20
Nantucket, . . . . .	-	1	-	-	-	1
Norfolk, . . . . .	-	8	2	-	-	5
Plymouth, . . . . .	2	5	5	-	-	12
Suffolk, . . . . .	-	1	-	-	-	1
Worcester, . . . . .	-	11	6	-	-	17
TOTALS, . . . . .	14	96	33	-	-	143

The rate of wages of females, without board, is reported from but 143 towns. Of these, in 96 the rate is over \$20 but under \$30; in 14, \$10 but under \$20; while in 33 the reported rate is \$30 but under \$40.

The next table presents the monthly wages for females, with board.

COUNTIES.	NUMBER OF TOWNS REPORTING SPECIFIED MONTHLY WAGES (WITH BOARD) FOR FEMALES						
	Under \$10	\$10 but under \$20	\$20 but under \$30	\$30 but under \$40	\$40 but under \$50	Over \$50	Totals
Barnstable, . . . .	-	9	1	-	-	-	10
Berkshire, . . . .	1	24	2	-	-	-	27
Bristol, . . . . .	-	14	-	-	-	-	14
Dukes, . . . . .	-	5	-	-	-	-	5
Essex, . . . . .	-	24	-	-	-	-	24
Franklin, . . . . .	-	23	1	-	-	-	24
Hampden, . . . . .	1	15	-	-	-	-	16
Hampshire, . . . .	-	22	-	-	-	-	22
Middlesex, . . . .	1	32	1	-	-	-	34
Nantucket, . . . .	-	1	-	-	-	-	1
Norfolk, . . . . .	-	16	1	-	-	-	17
Plymouth, . . . . .	-	14	1	-	-	-	15
Suffolk, . . . . .	-	-	-	-	-	-	-
Worcester, . . . .	1	46	-	-	-	-	47
TOTALS, . . . . .	4	245	7	-	-	-	256



The number of towns reporting monthly wages for females, with board, is 256. In 245, or nearly the entire number, the reported rate is \$10 but under \$20; in four others less than \$10, while in the remaining seven the rate is \$20 but under \$30.

Summarizing the returns as to wages contained in these tables, it is sufficiently indicated that \$30 but under \$40 may be considered a standard wage for males without board; while for females without board \$20 but under \$30 is a representative figure. For males with board, a wage varying from \$10 to \$30 per month appears to be representative. Of the number of towns from which this rate is reported slightly more than one-half report a wage in excess of \$20 but under \$30. For females with board, \$10 but under \$20 is a standard wage.

The respondents were asked, also, to reply to the following: "In case there is a lack of agricultural labor in your town, what means do you adopt to secure help from elsewhere?" The replies to this question are presented in the following table:

COUNTIES.	No Lack of Em- ployés	Intelli- gence Offices	Adver- tise- ments	Intelli- gence Offices and Adver- tise- ments	Intelli- gence Offices and from Maine and Nova Scotia	Agents for Foreign Help	Personal Efforts and Efforts of Friends	Reply Indefi- nite	Unan- swered	Totals
Barnstable, .	22	9	1	-	-	1	5	4	10	52
Berkshire, .	31	12	14	-	-	22	16	13	14	122
Bristol, . .	16	20	8	1	1	6	6	2	3	58
Dukes, . . .	8	5	-	-	-	5	-	-	2	15
Essex, . . .	18	46	6	-	-	6	14	4	11	105
Franklin, . .	11	14	8	-	-	55	16	3	15	122
Hampden, . .	9	16	-	2	-	13	8	4	7	50
Hampshire, .	10	26	6	-	-	44	9	3	9	107
Middlesex, .	16	85	1	-	-	4	11	6	6	129
Nantucket, .	1	-	-	-	-	2	-	-	-	3
Norfolk, . .	6	29	8	1	-	1	3	2	6	51
Plymouth, . .	9	34	-	-	-	3	5	3	4	58
Suffolk, . . .	-	2	-	-	-	-	-	-	-	2
Worcester, . .	34	56	3	4	1	9	14	6	11	138
TOTALS, . .	186	354	45	8	2	171	107	50	98	1,021

Of the respondents, 354 rely upon intelligence offices alone to secure help when it cannot be found in their immediate locality, and 45 advertise, presumably, in the newspapers. Others numbering 171 answer that they apply to agents who

furnish foreign help,\* 107 rely on their personal efforts and the efforts of friends, a few rely on intelligence offices in connection with advertising, while 98 respondents allowed the question to remain unanswered, and 50 others gave an indefinite reply, which in effect left the question unanswered. Clearly, then, the intelligence office is the chief reliance of the farmer in case his demand for help is in excess of the local supply.

The final question related to the establishment of free employment registries for agricultural labor, and the respondent was asked to state whether, in his opinion, such a registry would be of use in supplying agricultural help when needed. The succeeding table indicates the character of the replies.

COUNTIES.	Yes (no qualification)	No (no qualification)	Yes (qualified)	No (qualified)	Not Stated	Totals
Barnstable, . . .	18	11	5	6	12	52
Berkshire, . . .	56	11	18	18	19	122
Bristol, . . .	34	2	8	5	9	58
Dukes, . . .	7	-	-	4	4	15
Essex, . . .	52	6	21	11	15	105
Franklin, . . .	56	15	20	12	17	122
Hampden, . . .	34	6	9	8	7	59
Hampshire, . . .	56	6	22	11	12	107
Middlesex, . . .	76	11	20	12	10	129
Nantucket, . . .	2	-	-	1	-	3
Norfolk, . . .	29	4	8	6	4	51
Plymouth, . . .	27	2	19	5	5	58
Suffolk, . . .	1	-	-	1	-	2
Worcester, . . .	64	10	21	18	25	138
TOTALS, . . .	514	84	171	118	139	1,021

Of the 1,021 respondents, 514 replied yes, without qualification, while 171 replied yes, qualifying their answer in various ways, most of the qualifications implying that they believed such a registry might be useful if it was properly managed; or indicating that they considered that the question of management, including also the care exercised in securing competent help, and in fulfilling other conditions which may properly be summarized under the single head of "good management,"

\* Agencies of this kind exist in Boston and New York, and possibly in other cities, supplying Polish and Russian Hebrews, especially religious refugees, for agricultural labor or other service. There are also agents who supply Italian laborers in gangs to contractors and others.

would have much to do with the success or non-success of the registry. On the other hand, 84 replied no, without qualification, while 113 replied no, but slightly qualified their answers, and 139 gave no answer to the inquiry.

It would appear to be the opinion of the majority of the respondents, as indicated by these figures, that an employment registry would be of use to them, and this majority might be considerably enlarged by the addition of those who replied in the affirmative, qualifying their reply by the condition that the registry must be properly managed. Probably those who replied unqualifiedly in the affirmative believe that such a registry would be of no value if improperly managed; so that if we are to consider that a registry, if established at all, must, of course, if successful, be properly managed, then we may include 685 answers out of 1,021 as practically in the affirmative, while only a small number were unqualifiedly in the negative.

The respondents, in replying to the questions contained on the schedule, frequently accompanied their answers by remarks. It is impossible to condense these remarks in tabular form, or, indeed, to present a full synopsis of them in text within the space of this report. Some of the more important may, however, be given.

In Barnstable County, where the cultivation of cranberries is an important branch of agriculture, a respondent says: "During the cranberry harvest there are several hundred pickers who come to this town and the Port of Plymouth. Cranberry meadows are generally made by Swedes and Finns." Another replies: "On account of the lack of help, and the difficulty of getting it, I let my land lie, and with agricultural machinery do the best I can to secure the hay crops. There ought to be a bureau, or registry, for laborers, and then farmers could go to the city and obtain help." Referring particularly to the cranberry harvest, another respondent from this County says: "In the early part of the picking season, pickers are hard to secure; towards the end of the season there is little difficulty." Still another respondent says: "In the cranberry season (September and October) there is a scarcity of

help of both sexes, but the berries have always been picked, although it is difficult to get the work done at exactly the time we wish ;” while another, doubtless more favorably situated, says : “ Can get all the men we want for 15 cents per hour, and at cranberry harvest can get all we want of both sexes by the piece at one-half a cent per quart.” Other respondents, from nearly every county, speak of high wages as a bar to the employment of help, rates being higher than the farmer can afford. Others speak of the poor quality of help secured through intelligence offices ; as, in many cases, the proprietors of such offices, in the opinion of the respondents, desire to work off into the country help which they know to be poor, and which they cannot place in the city.

In general, in the western counties, the remote towns experience a difficulty in obtaining help which is not so great in the farming towns near more populous centres. This has indeed been shown statistically. One respondent in Berkshire County says : “ There has been so much trouble in getting help, and the wages for help are so high, that many of the small farmers have hired but little, getting along as best they could.” Another says : “ Help from the city will not work in the country on a farm,” according to his experience. Another farmer of long experience says : “ I find that both men and women for good service must be brought up as boys and girls on the farm.”

In general, the respondents complain of the disproportionate rate of wages demanded by inefficient labor, of the general inexperience of the employes obtained from the city, and of the disinclination of persons who live in the city to come into the remote farm districts. Others allude to the seasonal nature of the employment as a bar to securing competent help, and indicate that there would be less trouble in securing help if the employment were continuous during the entire year. It appears to be true that in many localities the persons who are willing to accept employment on the farms are either of small industrial capacity, or are unsteady, either with respect to disinclination to remain long with the same employer or in one locality, or in regard to their habits, intemperance being frequently mentioned by the respondents. The quiet

life in agricultural districts, and the lack of social opportunities, such as may be found even in the most crowded districts of the cities, also interferes with the supply of farm labor.

Some of the respondents allude to the fact that employment on the roads by the town, at wages higher than the farmer can afford to pay, has increased the difficulty of obtaining agricultural labor. One respondent says: "Agriculture, especially near cities, requires much help at certain seasons of the year; and I would set 12 acres to strawberries if I could be sure of enough good pickers in the busiest season." It will be seen, of course, that employment of this kind would be distinctly seasonal and not of long duration. A respondent in Bristol County states: "Some of our berry men employed a large amount of help during the berry season from the mills of Fall River and Taunton." The business depression during the last year has apparently enlarged the available supply of the farm labor in the vicinity of the industrial centres, but not to a great extent in the remoter counties.

The competition between employment in the larger towns and cities and employment on the farm is generally noted by the respondents. Numerous remarks upon this head may be sufficiently indicated by the following statement from one respondent: "The tendency is to seek employment in the cities from eight to 10 hours per day, with good pay and little work." Of course, the phrase "little work" means little work as compared with the continuous toil during long hours on the farm. Another respondent summarizes the matter as follows: "It has become so difficult to obtain efficient, reliable help, men that care for anything but to pass the time away, and get their pay, that many of our farmers employ but a few persons, doing what they can themselves, and letting the rest go. I could keep a considerable number at work for some time, but what might be done is neglected, and I am running along as best I can."

While the competition between the industrial town or city and the farm tends, in many cases, to draw help away, yet the replies sufficiently indicate that, in some cases at least, where the employment is temporary or seasonal, and the location of the farm or market garden is near a city or large town,

a sufficient amount of temporary help can be drawn from the city to supply the need. Such help is, however, largely foreign, and of a low degree of industrial efficiency. As a rule, very little confidence is put in city help by the farmer, and many respondents allude to the utter inefficiency and untrustworthiness of so-called tramp help. In many localities recent immigrants are almost the sole reliance of those who desire agricultural help, such employes being placed by agents dealing exclusively with foreign help.

The replies in general reflect the great disinclination on the part of native born persons to remain on the farm. One respondent summarizes this disinclination as follows: "The fact is, men will not work on a farm if they can get anything else to do, and when we get one that is good, it is only a make-shift until he can get something more desirable." Another gives his opinion as to the disinclination of women to work in the country as follows: "They are much averse to living out of the city or a large village; they think they must have company of their own class."

While so-called green foreign help is, in many localities, the chief reliance of the farmer; yet, the general opinion as to such help is summarized as follows by one respondent: "Green foreign help is not very profitable for the farmer for the first season or two; it takes too much time teaching the help what to do; it is up-hill work with such help. When the help has been educated, it will not remain upon the farm." Another respondent puts it thus: "This section, at present, is fairly well supplied with labor, mostly Poles. Some of them are honest and faithful; others are ignorant and nearly worthless. When we get one so that he can understand our ways and language, he will strike for more wages than most farmers can afford to pay. A place where farmers could get honest and faithful help on reasonable terms would, I think, be a great boon." Another states: "The simple fact is, there is help enough if it was good for anything." Another, alluding to the prevailing difficulty of getting men from the factory towns and cities says: "I think the farmers have paid a higher wage than the mill owners, but the men seem to think that it is a disgrace to work on a farm, and would starve in the city rather than do

it. The men who come out are usually hard customers." In the same line, also, another respondent replies: "It is almost impossible to get a woman to leave the city to do housework. This is one of the hill towns, 25 miles from Springfield and 12 from Northampton, and many men also object as there is no place in which to spend the evening socially."

The general impression gained from the replies is that, in many localities, there is no dearth of labor of an inefficient and uneconomical kind; that in other localities assistance of any sort is hard to obtain; and that, as a rule, the chief difficulty encountered by the farmer arises from the greater social advantages, generally higher wages, less arduous toil, and more uniform employment afforded in the cities and large towns as against employment upon the farm.

## CONCLUDING SUMMARY.

This report was projected, and the collection of material begun, as part of the regular work of the Bureau, before the agitation which resulted in the creation by the Legislature, during its recent session, of a special Board on the Subject of the Unemployed. This explanation is necessary in order that this volume may not appear to conflict with the work upon which that Board is now engaged, or to anticipate its conclusions. The subject is one upon which it is not possible to acquire too much knowledge, and any contribution towards the solution of the problem may be helpful. We shall, however, refrain from recommendations which might be considered out of place prior to the completion of the investigations of the Board, confining this summary to a brief statement of conclusions, with such obvious suggestions as rest upon them.

Normal unemployment of course bears no comparison with unemployment due to business depressions, which may occur at any time, from financial disturbances, such as the contraction of credit, or on account of uncertainty as to the basis upon which business is to be conducted; to the wholesale displacement of large numbers of men due to the shifting of industries from one locality to another, such as sometimes takes place; or to the reorganization of labor due to a change in methods or the introduction of improved machinery. Such depressions and displacements inevitably cause much suffering, and tend to further displacement or enforced idleness by crippling the consuming power of the market.

The lower stratum of the population, in every industrial community, consists of those who for various reasons, such as personal incapacity, evil habits, misfortune of condition, etc., are constantly in danger of lapsing into pauperism, and who are frequently in need of temporary assistance. When business is good, these persons in our Commonwealth are not very numerous. But as the income of the head of the family, or the aggregate income of all the workers in the family in this stratum, is frequently only adequate to the family support, business depression or the failure to obtain continuous employment increases the number.



Omitting suggestions for the reduction of hours of labor, which must be of gradual adoption, but which, according to the claims that are forcibly made by those who favor such reduction, will tend to absorb a considerable number of the unemployed, proposed methods of dealing with the problem fall under one of the following general heads :

1. Farm colonies.
2. Municipal workshops.
3. Industrial colonies or communities.
4. Public works of utility, undertaken either wholly or partly at the public expense and municipal supervision.
5. Public labor bureaus or exchanges, intended to act as clearing houses, for the purpose of equalizing supply and demand, and to bring workers into relation with employers.
6. Training institutions to develop skill on the part of the lower grades of the unemployed, for the purpose of enabling them to become self-supporting and efficient members of the industrial force.

The first three plans, namely, farm colonies, municipal workshops, and industrial communities may be considered together. A co-operative community upon a somewhat novel basis has recently been suggested. Its projector explains the scheme as follows: "Let us say that there are 1,000 or 10,000 unemployed, able-bodied persons who desire work. Out of this number, a certain proportion can make shoes, others can spin or weave, others can make garments, others can build houses and do blacksmithing, and others can farm and take care of live stock, while many more without trades are capable of common labor of any sort. All they need in order to be fed, clothed, and sheltered is to be set at work to support one another." This is the central feature of the plan. The members of the community are to support one another. They are to consume one another's products. "Their products are not to be sold or to go into the general market at all to compete with wage-produced goods or with private employers, but to be consumed wholly within the group of previously employed workers."

This is probably the most extensive plan of industrial colonization of the workless that has ever been proposed. That those

most in need of help are at all adequate to become effective members of such a colony, is open to serious question. It may be doubted if the ordinary self-respecting workingman would care to become a member of such a colony, except upon compulsion. There are difficulties of superintendence to overcome, which seem almost insuperable, to say nothing of the superabundance of untrained labor and the lack of sufficient diversity of skilled and unskilled to be brought within such a colony, to render the group self-supporting. The projector of the scheme, however, thinks that "while the state works would be intended, at the outset, to attract only the needy unemployed, it is probable that the advantages resulting from security of employment, and the steady rise of maintenance which would follow the increasing efficiency of the system, would suffice not only to retain all who once entered this co-operative service, but to raise the condition of labor generally by compelling private employers to bid against the fair and humane system of employment."

The labor colony in general has peculiar attractions for theorists who, for the first time, are brought face to face with the problem. But, on the whole, the labor colony system, so far as yet tried, does not appear to have been successful in aiding the unemployed workman who has not suffered physical or moral collapse, or who is not subject to some physical or moral defect. That they have done something in the way of providing for the tramp and beggar, and for those who through moral lapses find it impossible to acquire honest employment, is certain. It is equally certain that very little has so far been accomplished through them in the way of reformation of those who resort to them.\*

The great obstacle to their success, apart from the fact that, in Germany, especially, they make no attempt to discriminate between the different classes of the unemployed, is, that like all such expedients, they are out of key with society as now organized. No matter how successful they may be in providing for a limited number of peculiarly envired cases, they do not

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\* The perception of this fact is now leading toward a further development of the German system, proposed by Dr. Berthold, which shall operate to exclude from the free colonies those who have been frequently imprisoned or who have become chronic colonists, and subject them to police treatment; or to a plan proposed by Pastor Cronmeyer involving the establishment of so-called "improvement colonies" for chronic cases, in which compulsory residence forms an element.

aim to absorb the unemployed into the regular industrial channels. They are *institutional* rather than social. The colonists are a class apart. They are, in a sense, "non-effectives." And it is one of the difficult features of the problem, that if it were otherwise, and such colonies exercised a regenerative effect upon their members, who when raised in skill or efficiency, were graduated to become competitive factors in the labor market, it would require great skill of administration to prevent interference with the ordinary course of industry, in spite of the best intentions on the part of the managers. Nevertheless, as has been said, industrial colonies, or similar methods, are urged by many, as remedial agencies.

On the other hand, Mr. John Burns, who may be regarded as representing the controlling opinion upon the question in England, has no faith whatever in labor colonies, considering them but the revival in another form "of the hated casual ward, with all its physical and moral iniquities." In one sentence he disposes of schemes like that just outlined: "The argument that the produce of labor colonies should be used and consumed inside, and should not be sold to people outside, is absurd, and presupposes that the colony is sufficiently large to include the numerous trades that are required to supply the wants of a working class population, and that the organization should be such as could only be arrived at after years of experiment."

Mr. Burns, as is well known, is a socialist, and would entirely reorganize the industrial system, but, as palliatives of existing evils pending reorganization, he makes several suggestions that are clear, practical, and so far as they go, worthy of careful attention. They fall under the fourth and fifth heads which have been stated, namely: Public works of general utility, and the establishment of labor exchanges or employment offices.

As to the province of these offices he says:

There should be established in every district council, parish, or vestry area, a completely equipped Labor Bureau, situated in the Town Hall. There the unemployed should be able to register themselves. . . . The bureau should be the medium of communication between the men seeking work and the employers, and at the same

time eliminate the loafer, to whom little consideration should be shown. . . . Telephonic or other communication between district and district should be arranged . . . ascertaining and exchanging the varying local industrial needs.

As to the provision of work itself, in periods of exceptional distress, he would have private and public relief disbursed by committees composed of representatives of different social organizations, *i. e.* trade unions, charity organizations, supplemented by representatives of the municipal authorities. Among the applicants for relief, the workers should be rigidly differentiated from the loafers, and relief in money or food should only be given to those who through inability to work or illness are entitled to such relief and who through temporary distress are not proper subjects for the workhouse. Upon this point it is worth while to present his ideas in detail.

The ordinary cases of distress should be left to the existing authorities, and should in no way be interfered with by the committee, except in the case of providing work for the able-bodied willing to take it. The advantages of this representative committee (upon which all classes are represented) would be the amalgamation of all sorts of sympathies, and the furnishing of such a sufficient conflict of interests and opinions as would secure an impartial distribution of relief, and prevent the overlapping of various agencies and imposture — advantages not always attaching to relief committees of one political, social, or religious view. If money is subscribed for the relief of the able-bodied, it should be handed over to the local authorities responsible for the cleansing, sanitation, and making of such public works as roads, streets, parks, and sewers. The surveyor or engineer (or superintendent) should be the responsible authority for the expenditure of this money, and so far as is possible the conditions of hours and wages current at the time should be rigidly observed. The men could be employed at fewer hours per day, or fewer days per week, than ordinarily, so that the aggregate wage earned should be no inducement either to malingering or refuse work elsewhere under ordinary conditions. If the amount of money is sufficient, then the work should proceed as if in that district no exceptional distress existed. The Poor Law Guardians (Overseers of the Poor) should act in conjunction with this committee, and should hand over to the local authority that amount of money to be spent in useful work or non-pauperising relief that would have been

spent in other directions if no such public works had been instituted. At Paddington in 1886 a public committee co-operated with the local authorities and jointly subscribed money for work for 350 men, and gave employment to 133 women on needle-work. The advantage of this course is that you distribute over all the men employed, without pauperising them, that amount of money which all people in the parish subscribe through the rates, and you make the support of the unemployed a collective compulsory charge on the district that profits by the work they performed.

Work should be of public utility, not necessarily of immediate demand, but prospectively required.

The work should be such as would give simple employment to the class which is mainly influenced by depression — the unskilled. Ground work on roads, sewers, and recreation grounds is the best, as the bulk of the cost of these works goes in wages for manual labor. Each locality to be responsible for its own unemployed, unless the extent of the works permit otherwise, and equitable arrangements are made with other districts.

Mr. Burns also suggests other and more theoretical methods of equalizing employment throughout the year, thus avoiding seasonal displacements, and for shortening working time, the abolition of over-time (which indeed is now generally demanded by the English Trade Unions) and other expedients intended to diminish the number of periodically unemployed persons.

The suggestions which have been quoted seem to be sane and practical methods of dealing with such cases as occur in seasons of exceptional business depression. What public relief work may become when maladministered is sufficiently indicated by the results under the old English Poor Law which we have outlined.\* That it is liable to as grave abuses as any other form of relief seems clear. When well administered, however, quite other results appear. The most conspicuous instance of this kind is perhaps the Cotton Famine relief work, undertaken in the cotton districts of England.†

Most theorists who have proposed palliatives or solutions of the problem have been very vague as to methods for aiding the unemployed woman. There have been few if any extended efforts for her relief, but this phase of the problem is likely to be most important in times of depression in every large city. Nearly all plans of municipal or quasi-municipal employment

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\* pp. 10-14, *ante*.† pp. 14-22, *ante*.

upon public work leave her out of account. Mr. Burns, definite as he is on methods of employment for men, becomes far less so in relation to women, and is disposed to rely upon factory legislation, reduction of hours of labor, and the gradual elimination of married women from factory employments. He says: "It is very difficult to suggest remedies that will at once affect workless women. Relief works suitable for men are not possible for them, although there is much work that each family in its own way could do to help those immediately around them."

It is well settled that temporary workshops for women, unless very carefully managed, are neither received with favor by the self-respecting girl or woman out of employment nor are they entirely satisfactory in their effect upon the workers who are employed.

It has been suggested that the unemployed woman might be placed in workshops running under private control, guaranteeing the proprietor against any possible loss through production in excess of the market. This presupposes, of course, funds in the hands of a committee which are to be expended not in equipping a new workshop, which must be carried on more or less uneconomically, but simply to extend production through its ordinary channels, utilizing unemployed labor under its usual and normal conditions, and for a fair wage. Such labor if utilized in excess of what would be otherwise employed would not be competitive, that is, would not displace other labor, its product would have economic value, and the wage thus earned would strengthen the market; while, better than all, the recipient of such assistance would be continued as one of the regular industrial army, and would not feel in any way subjected to stigma. Whether such a plan could be put in operation or not, would depend upon the co-operation of the employers; but it is not improbable that under it places could be found for at least as many as could be provided for in a temporary workshop.

Municipal employment of the unemployed, if undertaken in large cities, or under political management anywhere, subject to the abuses that not infrequently attach themselves to such management, has very obvious dangers. As to the principle underlying such employment under exceptional circumstances, and considered as a measure of relief, there can be no question.

Without considering the limitations which are at present placed upon the taxing power and borrowing capacity of cities, which of themselves are a sufficient bar to extensive municipal employment, it is plain that until the present industrial organization is materially changed efforts in this direction will be full of difficulty. We are not referring to direct employment on certain public works of utility or necessity, which may be undertaken in times of depression, but to the general provision of employment. The same causes which at any particular time limit production under private management will prevent economic production under municipal direction as long as the conditions controlling industrial operations in general continue as at present. Cities have no power to create work or to materially enlarge opportunities for employment, apart from the forces that control production, unless it is expected that work of no utility is to be undertaken for the sake of providing employment.

Indiscriminate relief whether of money or work harms more than it helps, and the relying upon the municipality to do those things which may be accomplished through persistent individual effort tends to become chronic, weakens character, and might easily be carried so far as to cause serious social evils.

Whatever may be the need of furnishing relief in cases of emergency, or the necessity for prompt action in junctures like that of last winter, it must be frankly said that the dissemination of a temporary fund is not the way to solve the problem of unemployment. No fund that is likely to be raised is at all adequate for the purpose, and even as a source of charity-relief, is of questionable value, apart from its tendency to destroy the stamina of those who rely upon it.

The experience in Boston is sufficient to support this statement. Those who received relief were principally unskilled or of little skill, and the amount of relief afforded was no more than equal to two weeks' pay per individual on the average. This was at a time of unusual depression, but the same sort of applicants might be expected to appear in any year, although possibly in less numbers, if a fund of equal amount were provided. These remarks do not involve criticism of the committee which administered the fund, nor do they reflect upon the generosity or motives of those who subscribed to it, nor is it intended to criticise harshly those who applied, and



who received work. Their condition was, in many instances, perhaps in most instances, such as to excite pity and entitle them to relief. We are merely speaking of the inadequacy of this method of removing the evil of unemployment. The meagre amount of the relief afforded through such channels must of itself discourage the skilled workman from applying, and it inevitably operated to create ill-feeling, because so little was forthcoming where much had been expected. Much ought not to have been expected, it is true, if one reflects that to have carried the 50,000 persons, who in the manufacturing industries alone were out of employment in Massachusetts during the last half of 1893, through the winter, at wages only half as large as they had previously earned upon the average, would have required a fund of nearly \$6,000,000; but this fact was neither known to, nor appreciated by, those who were most likely to complain of the small amount of work which it was possible for the relief committee to furnish.

The unemployed in general, under normal conditions, are of at least four classes:

1. Casual workers who engage for short periods and upon odd jobs; and among these may be included all without regular trades. These are relatively few in number in Massachusetts or in Boston. On the contrary, they are very numerous in London.

2. Those workers in trades which have alternating busy and dull seasons, or which are subject to weather conditions for their successful prosecution. In Massachusetts, Boots and Shoes, Building, and Straw and Palm Leaf Goods are prominent examples. But in these industries the periods of unemployment are of regular recurrence, are foreseen, and generally compensated for by the savings or foresight of the workers. In Boots and Shoes and Building, especially, earnings range much higher than in most other industries, especially, those included in the textile group, in which employment is more regular.

3. Superfluous workers in all trades. That is, workers in excess of the normal demand. This class except in times of peculiar depression has never been numerous in the United States.



4. Workers of low efficiency, untrained and relatively unskilled, who, at the recurrence of the dull season, or in times of depression, are the first to be thrown out. These are found in all trades. .

The mere enumeration of these classes indicates the magnitude of the problem with which society, in certain junctures, must deal. In cases of actual want almost the sole reliance, at present, is relief under the Poor Law or by private charity, and this carries with it a stigma, not always deserved, but, unfortunately, nearly always felt.

While we may say that the ordinary form of charity-relief by dole is rapidly becoming discredited, it is not yet clear what shall take its place. Just as there is great danger of chronic pauperism under the old forms of relief, so there is equal danger of absolute reliance on public aid rather than on personal effort. The problem is doubtless not insoluble, but at present we have not reached a satisfactory solution. Any panacea which is advocated for immediate adoption, no matter how strenuously, as likely to be permanently remedial, must be received with extreme caution. A warm heart without knowledge, equally with wide knowledge without sympathy, may carry one far astray on this subject as on many others.

Methods of dealing with the problem must be at once far-reaching and permanent. The subject is complicated by confusing those who are inefficient, or of low morale, with those who are willing and able to work, but who are unable to obtain employment. We should recognize that besides the divisions of the unemployed which have been given, they are of two general classes which include all others: the honest and the dishonest, — the worthy and the unworthy.

It is not necessary to inquire whether or not society is itself responsible for the morally weak, or to fix the exact point where individual responsibility ceases and society becomes culpable. One may theorize as he pleases upon these points. But, no matter what improvements may be desirable or possible in the future in the social organization, we must at present take things as they are. Into one or the other of these classes, all men fall, and the unemployed are not unlike other men in the qualities that belong to human nature. This is, indeed, disputed by

some, and many good men and women hold that the mere provision of opportunities for work is all that is needed to prevent pauperism, and do away with the unemployed. But we may take the testimony of Mr. Burns, himself a radical, a man who is identified with workingmen, and who certainly cannot be biased against the class with which he has been always associated and which he thoroughly knows and understands. He says:

In spite of what some advocates of work for the unemployed may say, I contend, as a socialist, basing my belief on an unequalled experience of the largest meetings of unemployed that have ever been held, and as spokesman on every occasion for deputations on this subject to Government departments in the past ten years, that until the differentiation of the laborer from the loafer takes place, the unemployed question can never be properly discussed and dealt with. Till the tramp, thief, and ne'er-do-well, however pitiable he may be, is dealt with distinctly from the genuine worker, no permanent benefit will result to any of them. The gentleman who gets up to look for work at mid-day, and prays that he may not find it, is undeserving of pity. I have seen the most genuine and honest men at meetings mixed up with the laziest and most drunken scoundrels.

Any method of dealing with unemployment which is likely to succeed must rigidly discriminate between these two classes. The careful study of the various methods outlined in this report leads inevitably to this conclusion. The two classes do not readily unite, and no attempt should be made to join them in any scheme for dealing with the evil. One class should be restrained and disciplined, the other aided upon some plan which should not involve stigma nor be demoralizing in its tendency, and which should possess the following essential elements:

1. It should not be inharmonious with the present industrial organization.

2. It should aim to fit the unemployed to enter the industrial body, and should contemplate their absorption therein at the earliest possible opportunity.

3. It should aim to render production more uniform, preventing, so far as possible, seasonal depressions, and it should also aim to carry production farther than at present.

The first step ought to be one of separation, and, fortunately, this is the step that may be most safely taken. With the first class, the evils to be combated are industrial inefficiency and moral defect, rather than unemployment. As concerns this class, the problem is primarily one of reformation and industrial training.

So far as the problem touches the subject of industrial training, it includes the sixth class of proposed remedies mentioned on page 242. This field is a broad one, and it is not possible to do more than enter upon it here. The lack of industrial capacity disclosed by those who were aided in Boston, and which has been shown wherever measures of relief have been introduced during the last winter, the remarks from the farmers who have given testimony in response to our inquiries, the experience of the European labor colonies, and other foreign agencies for dealing with the unemployed, point to the importance of a much more extended and thorough industrial training than the community now offers. Such training should include agriculture as well as shop work. Is it not significant that while thousands of persons with training were out of employment during the last winter, very few were applicants for municipal relief? It does not, of course, follow that the trained workman is never in need. The workman is, however, raised in capacity by training, he earns a higher wage, which usually enables him to tide over temporary or seasonal depressions, he is the last to be dropped, and if dropped can turn his hand to other employment than that usually followed, and his self-reliance leads him to seek other employment; all of which advantages tend to keep him out of the ranks of the permanently unemployed, and render him less likely to need or to ask for public aid.

If the colony system is to be adopted here, the experience abroad should afford help in two directions. It should teach what to avoid, and should prepare us for certain necessary modifications in the general scheme. The results of the German system seem to teach the absolute necessity of discrimination as to those who are permitted to enter such colonies, and to suggest the need of a broader and more intelligent grasp of the end toward which the whole scheme should definitely tend.

The cost of maintaining a colony here would undoubtedly be much greater than abroad, as the regimen would necessarily be much more liberal. There are no penal institutions in this country that are maintained upon so meagre a dietary as is common in the German colonies, and it cannot be expected that the inmates of an industrial colony here would contentedly accept it. As to the administration of the colony, it would seem that, presuming that we are to deal at first with the industrially inefficient and morally weak class, the penal colonies of Holland and Belgium are most likely to afford valuable hints.\* In any event, the scheme should embody :

1. Rigid discrimination as to character and capacity of inmates.
2. Compulsory residence and disciplinary treatment within the colony.
3. Industrial training as the prime end, regardless of whether the colony is self-supporting or not.
4. Graduation from the colony at the moment the colonists become industrially efficient.

Professor Mavor, to whose account of the continental colonies we have been much indebted, in considering the advisability of adopting the labor colony system in England, has clearly indicated some of the difficulties which will inevitably arise in endeavoring to establish such colonies here. He says :

It would appear then, as one of the main lessons to be derived from the experience of labor colonies on the Continent, that if the labor colony system is adopted, one system of colonies should be established first, for the discharged prisoner, the vagrant and the loafer, on the 'open' principle, and another for the worthy unemployed on the principle of 'selection' or at least 'investigation.'

But here there arise many difficulties both as regards administration and economic influence. No system which involves investigation prior to relief can give immediate relief. No system which involves admission into a colony on individual subsistence wage for individual

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\* For instance, Hoogstraeten and Merxplas. See pp. 46, 47, *ante*. See also La Chalmelle, pp. 48, 49, *ante*.

work can deal with the unemployed workman who has a family to support. No system by which the support of the family as well as of the individual is guaranteed, and dealing with existing material in the lower grade of labor, can result otherwise than in rapid increase in the population for whom support is required. . . . An industrial and farm colony which could offer to each man who applied the opportunity of working at the trade to which he had been trained, would be quite impracticable. The range of industries which it has been found possible to carry on in the colonies is very limited, partly owing to the difficulty of disposing of varied produce, and partly owing to the administrative necessity of concentrating attention upon a few specific and generally rudimentary industries. Were any other plan adopted, it is probable that the waste of material would bring the schemes to grief.

That the labor colony is a means of employing the discharged prisoner and the vagrant with advantage to society, and, on the whole, with advantage to the colonists themselves, there can be little doubt. The advantages outweigh the disadvantages. But for the workman who has been accustomed to regular employment, and who is suddenly thrown out, or, indeed for the intermittently employed low-grade workmen, the labor colony is a very questionable resort.

Firstly. From the point of view of the probable colonist. If he have a house, and a family, he will be unwilling to break up these for the purpose of entering a colony; and it would be inexpedient to attempt to induce him to do so. Whether he have a family or not, he may be so habituated to town life that the stillness of the country would be insufferably wearisome to him. He would become restless, and would speedily leave the colony. The more self-reliant he is the more he would be inclined to do this. If he has been trained to a specific industry he will, especially if he is a mature man, find great difficulty in adapting himself to a new trade, however rudimentary that trade may be.

Secondly. From the point of view of the administration of the colony. While the alert and skilful artisan from the town would undoubtedly make the best colonist, both in a disciplinary and in an industrial sense, he would be likely to remain for so short a time as to tend to make the class of superior men a positive source of loss to the colony.

There remains, however, the consideration that by a series of comparatively small colonies efficiently managed, single men who tend to drift into the ranks of general labor and thus to suffer themselves to be dragged down into the lower social grades, might recover in fresh country air and in healthy conditions the spring they had lost

in the town. As a sanatorium for the discouraged single workman the labor colony might thus serve a useful function. The case of the married workman is much more difficult.

The unemployed married workman cannot be transplanted so easily as the unemployed single workman, and to transplant him to a colony may not be the best mode of dealing with him. If he be a town handicraftsman he may not be willing to go back to the land, and if he will not, what is to be done with him? Excepting to the extent indicated, the continental labor colony system in its present condition does not seem to offer the solution of the problem of dealing with the evils of the want of employment of this class.

It remains to consider the institutions known as public labor bureaus or exchanges, sometimes termed municipal employment bureaus, intended to act as clearing houses for the purpose of equalizing supply and demand and to bring workers into relation with employers. This Bureau was instructed by a resolve passed by the Legislature, approved on March 29, to investigate this branch of the subject with a view to determining the expediency of establishing such offices in Massachusetts. The resolve, as originally reported by the committee, was subsequently amended so as to require a report thereon by the Bureau before the first day of May in the present year. Practically, therefore, but 30 days were available for investigation, including the preparation of a bill if the report were favorable.

In making its report as directed, the Bureau stated that it was impossible, within the limit of time fixed by the resolve, to secure full returns from the various sources of information upon which the Bureau relied, or to analyze carefully the information which had been obtained. It was also pointed out that, after the resolve was approved, the Legislature had established a Board to consider the Subject of the Unemployed. By the provisions of the act under which this Board was established, it was to "inquire into the methods adopted upon private or public initiative in this Commonwealth, and in other states and countries, for dealing with the question of the unemployed, their general results, and how far such methods would be applicable in this Commonwealth." The Board was also invested with authority to co-operate with the local authorities, public trades, or private organizations for the purpose of devising "measures

for securing a uniform system of registration and investigation of the qualifications of persons applying for employment." As the report of this Board was to be submitted to the Legislature before the second Wednesday in March in the year 1895, together with such bills as it might embody in its report, the Bureau suggested that action upon the particular branch of the subject covered in the resolve relating to Public Employment Bureaus, be held in abeyance until the report of the commission on the unemployed was received, as it would be unwise to anticipate such general measures as that Board might recommend, by legislation on a particular phase of the subject. It was also stated that if action were deferred, all the information which the Bureau might be able to collect on the subject would also be in hand, properly analyzed and reported to the Legislature.

The information as to the operation of these bureaus has been quite fully presented herein upon pages 81 to 113. Such offices in this country have been confined to the State of Ohio, although employment bureaus or registry offices, wholly or partly under state, municipal, or parish support, exist in France and elsewhere upon the European continent, in New Zealand, and, to a limited extent, in England. The German bureaus act in connection with the system of colonies, relief stations, and lodging houses;\* in Austria, also, they are connected with relief stations.† The institutions in France were to a certain extent relied upon as precedents in establishing the offices in Ohio. While the expediency of establishing such offices may, upon theoretical grounds, be plausibly advocated, yet their success is largely dependent upon the personal character of the management; upon their freedom from political or industrial complications; and upon the extent to which they are able to command the confidence and support of the two classes to which they directly appeal, namely, persons seeking employment and those who desire to employ.

The conditions under which they have been established elsewhere are not quite identical with those which exist in Massachusetts. For instance, in Ohio they were established mainly

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\* p. 41, *ante*.

† p. 49, *ante*.



as a protest against the abuses which grew up under the system of private intelligence offices, which had not been subjected to effective supervision on the part of the State or by the cities wherein they existed. In Cleveland and Cincinnati, the proprietors of such offices are required to obtain a license, for which a fee is charged, but no other restrictions have ever been placed upon them. As has been shown in this report on page 106, intelligence offices in this Commonwealth have always been conducted under the provisions of a special statute, and in Boston and Cambridge have been limited as to fees, while the provisions of recent legislation render them practically free, unless employment is furnished; that is, there can be no legal collection of a fee without furnishing employment. The contrary practice has always been alleged as one of the most frequent abuses growing out of the intelligence office system when not controlled by law.

The free employment offices in Ohio have led to a reduction in the number of private offices, and it is expected, according to the statement of the Commissioner of Labor, that private offices will finally be entirely driven out of existence. In France, however, where both private and free public offices exist, the volume of business in the private offices is greatly in excess, as will be seen by the statement on page 75. The private offices are, of course, strictly regulated.

We have presented the statement of the Commissioner of Labor of Ohio\* as to the success of the public offices in that State, but in order to obtain evidence from a witness who had no official connection with their management, the Bureau requested information from a correspondent who, from his experience, was entirely competent to give an opinion. His reply indicates that, so far as his observation extends, the offices are mainly utilized by women seeking positions in domestic service or by men who desire places as coachmen, gardeners, hostlers, and employment which may be properly classed under the head of domestic or personal service. He does not think the system accomplishes all that was expected, but believes the free offices have had a good effect in competing out of business unscrupulous private offices. Speaking particularly of the office in the city of Cin-



cinnati, he states that it has helped several thousands of unskilled persons to employment, mostly of a temporary nature, and he believes the free offices to be beneficial chiefly to the unskilled resident and non-resident laborers, and suggests the need of more active and progressive steps than have thus far been taken. During the recent business depression, with thousands unemployed, the offices were entirely passive agents and took no action or progressive steps. Such steps, indeed, could hardly be expected from their organization, as they are not intended to provide work but simply to act as mediums through which persons desiring employment and intending employers may be brought into communication with one another.

The expenses of maintaining the offices in Ohio for the six months ending December, 1893, as reported to this Bureau by the Commissioner of Labor, were as follows: Cincinnati: rent, \$180; all other expenses, \$111.10; Cleveland: rent, \$150; all other expenses, \$79.25; Columbus: rent, \$96; all other expenses, \$81.25; Toledo: rent, \$75; all other expenses, \$75.82; Dayton: rent, \$90; all other expenses, \$63.47. These expenses do not include salaries, but merely cover office rental, stationery, and incidentals; these items being paid for by the State, while salaries are paid by the cities in which the offices exist. The office at Columbus during the fortnight ending April 14, 1894, to take a single typical period, filled situations for 66 persons; the number of situations filled since the office was opened in September, 1890, being 7,548. An inspection of the reports from this office shows a variety of occupations among those who were registered for employment, the list being similar to what might be found in any city intelligence office.

The following table shows the number of males and the number of females registered at Columbus from April 6 to April 13, 1894, with the number of persons applying for employes of the specified classes, and the number of positions secured:

OCCUPATIONS.	Situ- ations Wanted	Help Wanted	Posi- tions Se- cured	OCCUPATIONS.	Situ- ations Wanted	Help Wanted	Posi- tions Se- cured
<i>Males.</i>	126	16	15	<i>Males — Con.</i>			
Millwright, . . .	3	3	3	Employment for man (together with wife),	1	-	-
Wheel maker, . . .	1	-	-	Moulder, . . .	3	-	-
Tinner, . . .	1	-	-	Printer, . . .	1	-	-
Tailor, . . .	1	-	-	Press feeder, . . .	1	-	-
Teamster, . . .	5	-	-	Porter, . . .	1	1	1
Cook, . . .	1	-	-	Packer, . . .	1	-	-
Drug clerk, . . .	1	-	-	Office work, . . .	1	-	-
Private family, . . .	7	-	-	Salesman, . . .	1	-	-
Barber, . . .	1	-	-	Bell boy, . . .	-	1	-
Agent, . . .	1	1	2	<i>Females.</i>	87	55	46
Store work, . . .	4	-	-	Factory work, . . .	8	1	-
Light work, . . .	7	-	-	General housework, . . .	26	24	20
Hotel clerk, . . .	1	-	-	Cook, . . .	6	8	6
Engineer, . . .	3	-	-	Assistant (housework),	5	3	3
Clerk, . . .	5	-	-	Nurse, . . .	4	-	-
Shop work, . . .	9	-	-	Second work, . . .	2	-	-
Laborer, . . .	20	1	1	Stenographer, . . .	2	-	-
Carpenter, . . .	4	1	1	Chambermaid, . . .	2	6	5
Solicitor, . . .	1	-	-	Dishwasher, . . .	2	2	2
Blacksmith, . . .	2	-	-	Laundress, . . .	2	1	2
Factory work, . . .	7	2	2	Day work, . . .	7	1	1
Hostler, . . .	8	-	-	Agent, . . .	-	-	1
Farm hand, . . .	3	1	1	Dining-room girl, . . .	1	4	2
Shipping clerk, . . .	1	-	-	Housekeeper, . . .	3	1	1
Watchman, . . .	2	-	-	Restaurant work, . . .	2	-	-
Driver, . . .	2	1	-	Upstairs work, . . .	-	2	1
Drill press, . . .	1	-	-	Pastry cook, . . .	1	1	1
Coachman, . . .	1	-	-	Clerk, . . .	3	-	-
Houseman, . . .	1	1	1	Kitchen work, . . .	1	-	-
House boy, . . .	2	-	-	Light work, . . .	2	-	-
Electrician, . . .	1	-	-	Store work, . . .	1	-	-
Apprentice, . . .	1	-	-	Tailoress, . . .	1	-	-
Collector, . . .	1	-	-	Solicitor, . . .	1	-	-
General work, . . .	-	2	2	Washerwoman, . . .	2	-	-
Hotel work, . . .	2	-	-	Skirt hands, . . .	3	-	-
Cabinet maker, . . .	1	-	-	Housemaid, . . .	-	1	1
Machinist, . . .	4	1	1				

The offices in Ohio do not appear to have encountered any opposition due to interference in industrial disputes, although nothing in the law under which they are established seems to restrict such interference, nor do they seem to have met with difficulty on account of the investigation of the character or references of those who apply for situations. It has been conclusively shown by the experience of the offices in England, that unless careful inquiry is made as to the antecedents and

capacity of those who wish work, employers are likely to ignore them. In order to secure their support, the office must be able to satisfy them that the persons sent to them for employment are competent and trustworthy. On the other hand, if such inquiry is made, the office is apt to encounter opposition from the working people on the ground that such inquiry practically introduces the so-called "character note," and enables employers, by withholding recommendations, to prevent the employé from registering at a public office; in fact, makes the public office a factor in the system of black-listing. In a Commonwealth distinctly industrial like our own, all these difficulties would possibly be encountered and should be guarded against. In summarizing the conclusions derived from the investigation by the English Department of Labor, the report on "Agencies and Methods for Dealing with the Unemployed" remarks:

To treat the degree of success which they have achieved as the measure of the possibilities of this kind of industrial institution would be in the highest degree unfair. Nevertheless, the variety of experiment has been sufficient to enable a few provisional conclusions to be arrived at, which, though not to be regarded as absolute or final, may at least be of some use in pointing out the directions in which success is most and least likely to be attained.

With these reservations, it may be said in the first place that one essential condition of success appears to be selection of applicants. Without such selection employers will not as a rule use the bureaus. In a large centre the selection can only be made by adequate inquiry, and this would seem necessarily to involve something of the nature of the 'character note' to which some workmen object. Without going into the question of the reasonableness of their objection, it may be said that without this condition a labor bureau is unlikely to be of much material service to the trade to which the objectors belong. While inquiry appears necessary in large centres, it may be safely replaced by the far more effective guarantee of personal knowledge in the case of registries in small country districts where the great bulk of applicants, both workpeople and employers, are known to the superintendent. This would seem to support the view held by some persons of experience, that labor bureaus are more likely to succeed in small and medium sized towns than in the largest centres.

Secondly, and for much the same reasons, it appears not to be desirable to mix up the functions of a labor exchange with those of a

relief-agency. The supply of efficient labor to employers and the rescue of the 'submerged' are essentially different problems.

Thirdly, it would appear desirable, where practicable, for a bureau to steer quite clear of trade disputes, by declining either to supply men to a workshop where there is a strike, or to register the names of workmen on strike. The superintendent cannot, of course, always inform himself as to all the strikes which may occur, but it might, perhaps, be possible for the trade society or employer, as the case might be, to send a notification of the fact of a dispute to the local labor bureau. In any case the interference of a labor bureau in a trade dispute would tend to impair its usefulness, and to make it unpopular. Cases illustrating this danger have already occurred in some districts.

Fourthly, whatever scheme be adopted the success of a labor bureau will depend mainly on the energy, tact, and judgment of the manager, and the degree to which he can gain the confidence of employers and workmen.

With the best of conditions, labor bureaus can hardly be expected ever to become the sole or principal means of bringing together employers and unemployed. The bulk of the work of hiring labor and seeking employment will in most trades continue to be done directly between workmen and employers, as is the case even in countries where, as in France, the system of bureaus has been carried much further than in the United Kingdom. Nor as regards the organized trades can labor bureaus as a rule compare in utility, so far as workmen are concerned, with the work of a well-managed trade society, such as some of those described in a previous section. The chief field of usefulness of labor bureaus is likely, therefore, to be found for some time to come in the less highly organized trades.

Without attempting to forestall the conclusions which the Board on the Subject of the Unemployed may reach, it may be suggested that a registration office, to be of the greatest practical value in Massachusetts, might well cover very much more ground than is usually covered by offices of this class. If it is to be restricted to the work ordinarily performed by an intelligence office, its expediency may be doubted. It is abundantly shown by the statistics contained in this report as to the number of applications and the number of situations filled, both by the intelligence offices and by the philanthropic agencies which cover practically the same field, that the number of applications is far in excess of the places which it is possible

to secure. It is extremely doubtful if a public office would be able to do much better. Indeed, the statistics from the offices in England, published month by month, show substantially similar results, as will be seen from the following table :

MONTHS IN 1894.	NUMBER OF WORKPEOPLE ON REGISTER.		NUMBER OF APPLICATIONS DURING MONTH			Number of Work- people Placed in Situations During Month
	At Beginning of Month	At End of Month	WORKPEOPLE		Em- ployers	
			New Ap- plications	Renewals		
February, . . . . .	2,834	2,409	2,378	1,005	347	471
March, . . . . .	2,409	2,053	1,607	1,082	362	350
April, . . . . .	*2,287	2,364	1,921	2,086	434	503
May, . . . . .	2,364	2,236	1,844	2,124	413	517
June, . . . . .	†2,187	2,080	1,663	2,087	372	501
TOTALS, . . . . .	12,081	11,142	9,413	8,384	1,928	2,342

It will be seen, that out of a grand total of 9,413 applicants, there were but 2,342 situations filled.† Manifestly, such offices cannot initiate employment. It would be futile to expect too much from them, or to anticipate results that are not likely to be fulfilled. If their establishment is taken to mean that merely by registration work is to be obtained, much disappointment will inevitably follow.

The Bureau has collected testimony from representatives of organized labor and from employers respecting the advisability of establishing free employment offices, and the opinions upon either side may be easily summarized. It may be said that those who are competent to speak for organized labor are inclined to favor them, while qualifying their replies by the condition that if established, they shall be held entirely neutral in labor disputes. That is to say, in the event of strikes they should not be permitted to furnish men to fill the places of strikers, and in case of disputes as to wages, they should not attempt to provide employes at a lower rate of wage than that for which contention was being made.

\* Includes two bureaus not included in preceding month.

† Not including one bureau included in preceding month.

‡ See also the experience at Columbus, pp. 258 and 259, *ante*. In France, the free registry offices received 24,805 applications in a single year, but only 13,292 offers of places, actually filling but 10,856 situations, p. 71, *ante*.

As to whether the skilled and well-organized trades would use such bureaus, there seems to be some doubt on the part of their representatives, and probably experience here would be the same as elsewhere, the offices being, for the present at least, used principally by unorganized labor, and by workmen either unskilled or possessing little skill. Employers, on the other hand, so far as their opinion is reflected in the replies to the Bureau, do not generally believe that such offices would be of any value to them or to the working classes. They do not think they would be likely to use them personally. It ought to be said, however, that opinions upon either side are apparently largely based upon feeling rather than upon actual knowledge.

The opinions of the farmers who have replied to the questions of the Bureau as to the expediency of such offices will be seen from the statements which are summarized on pages 235 and 236; but these opinions, like the others, are mainly impressions.

So far, we have considered public employment offices which are practically ordinary intelligence offices under State or municipal control. It is conceivable that a registration office upon a much broader basis might be established in every industrial centre and especially in such towns as are likely to contain a considerable number of unemployed persons, the plan combining the functions of the usual employment registry with a system of tests intended to separate those who actually desire work from those who do not, and that such offices might be of great value in connection with a scheme for restraining the tramp, transferring surplus workers from one locality to another, and perhaps aiding a movement from the crowded city districts to the country.\* It need not be said that political influences and political methods should have no part in such an office. One such office in the city of Boston might possibly settle the question whether any considerable number of persons in the cities of Massachusetts are willing to go upon the land and accept such conditions as are attached to agricultural labor; whether if such persons exist in numbers they are competent to undertake the work, either physically or industrially, or, if not competent, whether they are ready to undertake the training necessary to make them so. These questions can probably never be

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\* See, along this line, the suggestions of Mr. Burns, pages 244 to 246, *ante*.

definitely settled until an opportunity is provided for placing such persons, if they exist. Inquiry as to their existence and theories about them, will never be conclusive until the question is brought to the definite basis of available opportunity and settled by a practical working experiment. This, however, is one of the subjects with which the special Board on the Unemployed is to deal, and for that reason will not be considered here at greater length.

This Bureau, with its present experience and facilities, might easily collect and publish monthly, for public circulation, a bulletin giving the facts as to the state of employment in each industrial centre, and such other information as would be timely and of value. This would, of course, require legislative sanction and an appropriation, which need not be very large. The bulletin might be similar in size and general form to the Crop Report now issued by the Secretary of the Board of Agriculture. Similar information is issued monthly by the English Department of Labor and by the Department of Labor in New Zealand, and the plan involves simply an extension of the work legitimately within the province of Bureaus of Statistics of Labor, with provision for frequent publication and circulation. If local registry offices are established they might be required to report monthly to the Bureau, and the reports, condensed and summarized, could be given general circulation and exchanged between the different offices by means of such monthly bulletins. Similar reports are provided for in the Ohio Law.

It is not, of course, necessary that the management of the registry offices be connected with the Bureau as in Ohio, or indeed subjected to State management at all. On the other hand, they might be left entirely to the local authorities. This question of management should be determined principally by the scope of the offices and their place in any general scheme that might be adopted. Whether registry offices are established or not, a monthly bulletin to be issued by this department is entirely feasible, and could be readily prepared and circulated, if the requisite legislation is enacted. Besides containing information as to the state of employment, other timely statistical data relating to the condition of our industries could be incorporated, which would increase the interest and efficiency of the bulletin.



## NOTES.

The publication of a limited edition of Part I., in pamphlet form, gives opportunity, prior to putting the report in covers, for the revision or explanation, which is apparently needed, of certain statements contained in the preceding pages.

### I.

Upon pages 135 and 136, it is stated that the management of the Bedford street work-rooms, and smaller rooms elsewhere in Boston, was in the hands of a sub-committee, composed of women. A similar statement appears upon page 169. This is not strictly accurate, inasmuch as the sub-committee had control of the admission of applicants only, the administration of the rooms not being in its charge.

In this connection it may also be stated that details as to the character of the work performed in the different relief departments, the adaptability of the persons employed to the kinds of work furnished, as well as financial details, all of which are of interest and importance, being subjects upon which the relief committee is alone competent to speak with authority, are for that reason not covered here ; our purpose being simply to present the statistical information derived from the investigation of applicants, together with a brief analysis. This limitation of purpose will also explain the absence of detailed allusion to work-relief undertaken in other cities of Massachusetts besides Boston, similar statistical details not being generally available.

### II.

Upon pages 201 and 202, the following paragraph is found, relating to the applicants at the Bedford street work-rooms :

From the recapitulation, it appears that of the 3,525 applicants, the names of 1,183 were found to have been recorded upon the books



of the Associated Charities, while the others, 2,342 in number, were not so recorded. Of the 3,525 persons making applications for work-relief, 883 had received aid through associations, institutions, etc.; while 2,642 had not received such aid. This shows that 74.95 per cent of the whole number of applicants *had not applied for* relief of any kind until they were forced to do so by the prevailing industrial depression.

In the foregoing paragraph, as will be plain from an inspection of the table which preceded it, and upon which it is based, the words italicized should be "had not received," instead of as printed. And in order to prevent misconception, it should be repeated that the statement as a whole rests upon the results of an examination of the records of the Associated Charities, and that it is only as disclosed by this examination that 2,642 applicants, or 74.95 per cent of the whole number, appear not to have received aid. Therefore, bearing in mind also possible slight errors in the examination on account of the lack of sufficient identification, the statement may be regarded as approximate rather than absolute. The same qualification applies to a similar statement on page 213.

### III.

Unemployment is defined by the Century Dictionary as "the condition of being unemployed." This report, which bears that title, mainly discusses the evil from an impersonal standpoint, and the remedies which have been suggested or adopted for its treatment. It also presents statistical evidence bearing upon its extent in Massachusetts, and other correlative statistical data. It nowhere contains an estimate of the maximum number of persons out of employment in the present year or in any preceding year. Such estimates, more or less accurate, have appeared from various sources, but whatever their degree of accuracy, they are simply estimates. The only actual returns, which included every person in the Commonwealth, are those published in 1887 of which the results are shown in detail on pages 114 to 121. A similar inquiry will be conducted in connection with the Decennial Census, to be taken in 1895. The annual returns from the different industries, which, we repeat, may be relied upon as statements of proportions, will,

however, indicate both the regularity of employment in factory industries under usual conditions and the variations therefrom, month by month, since 1889. All of the statistics presented have been collected with care, and the experience of this Bureau has shown that no more difficulty is to be encountered in securing such data than in any other field of statistical investigation. So far as their collection depends upon a house-to-house canvass, the element of inaccuracy is no greater, and in fact is less, than attaches to some other Census inquiries. This Bureau has never found any unwillingness to state the facts upon this question, or any apparent disposition to conceal or to distort facts, either upon the part of the employers, who are requested to make returns, or in making a canvass from house-to-house.

The main purpose of this report is not the solution of the problem, but the presentation of evidence. The absence of recommendations other than general suggestions is sufficiently explained upon page 241. Still, in closing these pages, it may not be out of place to state what, of course, is perfectly obvious, but which we do not wish to appear to overlook, that the solution of the problem of lack of work cannot rest entirely upon statistics. Every such question has its personal side; and while statistics, faithfully collected and impartially presented, are valuable as evidence, we by no means forget that there are many things that cannot be stated statistically, which must be taken into account. The present volume, indeed, is not confined to figures, but records theory and experience, along different lines. The different theories are to be tested, not merely by statistics, but in the light of all other evidence, by the exercise of wise judgment, tempered with warm human sympathy and freedom from prejudice.



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PART II.

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LABOR CHRONOLOGY.  
1893.

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## PART II.

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# LABOR CHRONOLOGY—1893.

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[NOTE.—In all paragraphs where the name of the city or town is not specifically mentioned, the city of Boston is the locality to be understood.]

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## HOURS OF LABOR.

### JANUARY.

4th. — At a meeting of Master Builders Association, Boston, the request of its employes for eight hours was discussed.

5th. — At a meeting of the Boston Boiler Makers Union the newly elected officers were installed and four new members admitted. The nine-hour day schedule was discussed and the members reported the prospect bright. — Local Lodge No. 264 of Machinists, Boston, installed officers and admitted fourteen new members. It was voted to circulate a petition protesting against the practice of men working on two machines in government shops.

8th. — At a meeting of Union 1 (Operative Tailors) it was resolved to take some immediate action to bring about the abolition of the overtime system required by the contractors among the Boston operative tailors.

15th. — At a meeting of the Boiler Makers Union, Boston, ten new members were admitted and twelve applications for membership received. The nine-hour day was the subject under discussion.

19th. — A new lodge of the International Machinists Association was organized at Hyde Park with fifty charter members. — At a meeting of Local Lodge No. 264 of Machinists, Boston, the idea was endorsed of a machinist trade council, to be composed of delegates from the International Machinists Union and International Machinists Association.

21st. — The Carpenters City Council met and adopted a recommendation calling on the Building Trades Council to hold a public meeting of the building trades in favor of the eight-hour day.

22nd. — At a meeting of Typographical Union 13 the report of the delegate to the Cincinnati nine-hour convention was endorsed, and it was decided to recommend to the local unions the proposition to levy a 5-cent assessment for the nine-hour movement. — Boston Carriage Makers Union admitted 20 new members and the subject of the best ways and means to secure less hours of labor was discussed, but no decisive action taken in the matter. — The Tin Plate, Sheet Iron, and Cornice Workers Union discussed a movement in the trade for less hours in the Spring.

24th. — At a meeting of Carpenters Union 33 fourteen new members were admitted and the eight-hour subject discussed.

25th. — The members of Plasterers Union 10 met and discussed the question of hours of labor and wages for the building season of 1893.

26th. — The executive board of Granite Cutters Union held a meeting and discussed the eight-hour day.

29th. — At a meeting of Bricklayers Union No. 3, Boston, the subject under discussion was the effort of the organized bricklayers of Boston to have the eight-hour work-day recognized during 12 months of the year instead of during only the Winter months. The meeting selected a committee of arbitration to meet a like committee of the Mason Builders Association to arrange for an agreement for the coming season.

### FEBRUARY.

2nd. — At a meeting of the Tin Plate, Sheet Iron, and Cornice Workers Union, Boston, it was decided that on and after Aug. 1, 1893, an effort should be made to obtain shorter hours without reduction in pay and also to establish a minimum rate of wages. — The first of a

series of conferences regarding the adoption of an eight-hour day in the various branches of the building trades of Boston occurred in the rooms of the Master Builders Association between representatives of the Mason Builders Association and Bricklayers Union 8. — At a meeting of Stone Masons Union 1, it was decided to request the Mason Builders Association to concede the eight-hour day for the season of 1893.

9th. — A second meeting of committees representing the Mason Builders Association and Bricklayers Union No. 8 was held and resulted in the bricklayers securing the eight-hour day. The idea of arbitration and conciliation was also recognized by the creation of a permanent board of arbitrators to meet on the last Thursday of every month.

14th. — At a meeting of the Tin Plate, Sheet Iron, and Cornice Makers Union the advisability of asking for a nine-hour day and a minimum rate of wages of 30 cents per hour was discussed; it was decided to hold a conference with the master cornice makers in relation to the matter.

15th. — At meetings of Painters and Decorators Union 236 and Plasterers Union 10, Boston, the eight-hour day was discussed.

17th. — Iron Moulders Union 106, Boston, held a meeting and considered the charge brought by members against the manager of a local iron foundry, of discriminating against union men, and of requiring men to remain at work until 6.30 and 7.30 P.M. A grievance committee was appointed to take charge of the matter. — The members of the Horseshoers Union, Boston, discussed the probability of securing shorter working hours.

28th. — At a meeting of Mattress Makers Assembly 3873, K. of L., it was decided to adopt a label to be placed upon all mattresses made by Knights of Labor; resolutions were adopted condemning the proposition to take any portion of the Common for purposes of street railway traffic.

### MARCH.

2nd. — Representatives of the Mason Builders Association and Stone Masons Union 1 met and drew up a schedule of wages and hours of labor for the season of 1893. The stone masons asked that eight hours constitute a day's work; if their request was granted they offered to surrender one hour's pay. This proposition was agreed to and a further agreement entered into by the joint committee that overtime work should be paid for at the rate of time and one-half; that Sunday and legal holiday work should be paid at the rate of double time, and that 42 cents per hour should be the rate of wages. It was decided that the arbitration committee of the Mason Builders Association and the Stone Masons Union should meet once a month.

4th. — Preparations for establishing a shorter working day were perfected at a meeting of the State Council of Carpenters; reports were read which showed that new unions had been organized in several parts of the State and that the gain to the organization from the organizers' work amounted to over 200 members in two weeks.

13th. — A public meeting under the auspices of the Carriage and Wagon Workers Union No. 9, Boston, was held and the eight-hour day discussed.

16th. — A meeting of the lathers of Boston was held and it was voted to form a union; the question of eight hours and higher wages was considered.

17th. — At a meeting of the Carriage and Wagon Workers Union, 108 new members were initiated. According to the reports of the special organizing committees, 123 out of 126 carriage factories in Boston and vicinity were under the jurisdiction of the union, and every employé in them had taken a pledge that he would stand firm for nine hours.

19th. — The eight-hour day was the principal topic of discussion at a meeting of Building Laborers Union 6; it was voted to hold the regular meetings of the union on the first and third Sundays of the month.

20th. — At a meeting of Carriage and Wagon Workers Union 2, it was decided that on and after Monday, March 27, the members of the trade working in Boston and adjacent towns should work but nine hours per day and eight on Saturday, without reduction in wages for day hands and an increase in wages of 10 per cent for piece hands. — Five of the local carriage and wagon manufacturers notified their employés that they would concede the nine-hour day.

21st. — At a meeting of Painters and Decorators Union 11, Boston, committees were appointed to arrange for meetings for the purpose of agitating the eight-hour movement. — Four more carriage manufacturers notified their men that on and after Monday, March 27, the hours of labor would be reduced to nine per day, with eight on Saturday, without reduction in wages.

22nd. — At a meeting of representatives of the Master Builders Association and Building Laborers Union 6, a schedule of wages and hours of labor for 1893 was arranged, the laborers concluding to accept eight hours' pay for eight hours' work. It was also agreed that all time before 8 A.M. and after 5 P.M. should be considered overtime, and be paid for at the rate of time and one-half; that work performed Sunday, Fourth of July, Christmas, and Labor Day should be paid at double rates, and that wages should be 25 cents per hour. — The advisability of

demanding an eight-hour day was considered at a meeting of Painters and Decorators Assembly 4496, K. of L. — At a meeting of Carriage and Wagon Workers Union the members voted unanimously that they would strike in all factories where nine hours was refused. — Two more carriage manufacturers granted the demands of their men for shorter hours.

**24th.** — At a meeting of the Carriage Manufacturers Association the following resolutions were adopted :

"We the undersigned, members of the Carriage and Wagon Manufacturers Association of Boston and vicinity, in council assembled,

"Resolved, that the demand as made by Carriage and Wagon Makers Local Union 9, attested with the seal and described herein, is premature, unjust and inequitable;

"Resolved, that to defend our rights and protect our business we, the undersigned, bind ourselves together, and do agree, individually and for the firms which we represent, not to accede to the demands made by Carriage and Wagon Makers Local Union 9 of Boston and vicinity, namely, that on and after Monday, March 27, 1893, nine hours shall constitute a day's work, with eight hours on Saturday, and 10 hours' pay; also, an increase of 10 per cent for piece workers, and that no discrimination shall be made against persons on account of this demand.

"Resolved, that a settlement of the hours of labor should be left discretionary with each employer to deal individually with his employes, and we reserve and claim the right to run our shops on a 10-hour basis without interference or intimidation from any person or union.

"We further agree not to hire or employ each other's workmen during the contemplated strike, pending a settlement of the same, and should we desire to cancel this agreement or withdraw our names therefrom, we will notify this association at least seven days in advance."

**27th.** — At a meeting of Painters and Decorators Union 11, the eight-hour day was the subject of a long discussion, and it was decided to present the matter to the District Trades Council for action.

**30th.** — Three carriage manufacturers withdrew from the association and notified the union that they would grant their employes nine hours with ten hours' pay. — The carriage makers and repairers of Lynn, with few exceptions, granted their men a shorter working day.

## APRIL.

**3rd.** — The president of Machinists Union 28, of Boston, stated that twenty-six firms had replied to a letter which had been sent to all employing machinists in the city, asking them to grant the nine-hour day, and that all but one expressed their willingness to comply with the request. — The blacksmiths of Lawrence belonging to Local Union 5681 submitted a proposal to the employing blacksmiths to the effect that on and after May 1 nine hours should constitute a day's work without loss of pay.

**4th.** — The New England division of the National Mule Spinners Association held its semi-annual convention at Waltham. It was stated that this organization had a membership of over 3,000 workmen. The secretary's report showed an increase of 800 members in the past six months. It discussed the influence of this union in securing a reduction in the hours of labor for all branches of textile workers. The report said :

"We have long advocated a reduction of the hours of labor, and feel that, as a result of our agitation in Rhode Island, a 58-hour labor bill will be passed in a few weeks. A bill similar to that has been defeated in New Hampshire, but we propose to make a hard fight there until we are successful."

The union voted a sum of money to be used in the shorter work-day agitation. It was voted to create a national fund to be at the disposal of the executive council to be used, if needed, in enforcing demands on any corporation, or for similar union work. This fund to be raised by an increased per capita tax on the local unions. A transfer card system was adopted so that men might be transferred from one union to another, and to enable union men to discriminate against non-union men.

**6th.** — At a meeting of Pavers Union it was reported that the treasurer had collected during the past year \$1,275 and expended \$725. — Boston Lodge 264 of the International Association of Machinists met and ratified the agreement of the West End Street Railway to give machinists in its employ 56 hours per week without loss of pay.

**9th.** — The Tin Plate, Sheet Iron, and Cornice Workers Union held a meeting and discussed the nine-hour day; as a result of the meeting 10 workmen joined the union. — Delegates from a number of cities attended the monthly meeting of Massachusetts Knights of Labor Alliance. Considerable attention was paid to the several labor measures then pending in the Legislature. The Alliance urged the passage of a bill limiting the daily hours of labor for steam railroad employes to 10 per day. Delegates were elected to the Knights of Labor conference, to take place at Worcester, April 18. — For the second time within a year the boiler manufacturers and iron shipbuilders were asked to concede the nine-hour day to their employes. In order to enforce



their first demand for a nine-hour day, the men, all members of Branch 10, Boiler Makers and Iron Shipbuilders International Union, struck on May 4, 1892, but returned to work in 13 weeks under an agreement that 58 hours should constitute a week's work, they having worked prior to the strike 59 hours per week. Recently the meetings of the union had been devoted to a discussion of hours of labor and other issues, with the result that on Thursday, April 6, the Boiler Makers Association was presented with the following rules and regulations adopted by the I. U. of B. M. and I. S. B. of Boston and vicinity :

" Art. 1. All work appertaining to old work to be recognized the same in the shop as outside.

" Art. 2. All men going on work outside the shop to have none but union help.

" Art. 3. That none but union men be employed at any time, either in the shop or outside; in case of large jobs, men to work nights, if required to get it through.

" Art. 4. That no boiler maker be asked to do other than boiler maker's work.

" Art. 5. On and after April 18, 1893, nine hours shall constitute a day's work and eight on Saturday, with the same pay as we receive for 10 hours." Upon receipt of the foregoing demands, a meeting of the 21 manufacturers of Boston and vicinity was held, and at the conclusion of the discussion the president was instructed to forward the appended reply to the workmen's request: " Replying to your communication of 6th inst. demanding certain concessions in the matter of work and wages, I am instructed by this association to say that it will not make these concessions, as the result of granting what you request would be simply the driving out of Boston of more than half the business in our line now done here.

" The boiler manufacturers and iron shipbuilders of Boston and vicinity are in continuous competition with those of other New England States, New York, New Jersey, and Pennsylvania, where the hours of labor are longer than they are here, even under the present arrangements, and where the wages are lower than they are here; and this competition keeps the prices for contract work so low that very small profits result.

" Should we grant your demands before the other manufacturers in the Eastern section of the country adopt like conditions serious injury to the members of your union must ensue. Your interests and ours are identical; they cannot be separated, and everything which is detrimental to the members of this association must, of necessity, injure the members of your union.

" It is the intention and desire of the members of this association to treat the men in their employ as liberally, both as to hours of labor and wages, as other concerns in the country in our line of business treat their men; and if we are not now doing this I assure you that the changes required to meet these conditions will be made without delay. It does not seem reasonable for you to demand more."

10th. — Two carriage manufacturers in Malden and one in Lynn granted the demand of their men for nine hours. — At a meeting of Bricklayers Union No. 3 it was reported that the eight-hour day was giving satisfactory results to both employer and employé.

11th. — The carriage workers of New Bedford formed a branch of the Carriage and Wagon Workers International Union of North America, with 50 charter members. They proposed to demand the nine-hour day. — The members of Painters and Decorators Union 11 engaged in a lengthy debate on the feasibility of enforcing an eight-hour day. — A Medford carriage manufacturer acceded to the demands of the Carriage and Wagon Workers Union, and his employées returned to work under nine hours with ten hours' pay.

12th. — At a meeting of Furniture Workers Union No. 24 it was reported that a certain firm in South Boston had offered its men nine and one-half hours' pay for nine hours' work, and that several had asked to work ten hours as they could not afford to lose the extra money. It was decided to refer the matter to the executive board. — At a meeting of Painters and Decorators Assembly 4495, K. of L., the most important matter discussed was the eight-hour day, and the feeling of the members was strongly in favor of co-operating with the other bodies of painters in securing it. They thought that the trade at large could secure the eight hours if it was put in the form of a request rather than as an arbitrary demand. — At a meeting of Stone Masons Union, the conference committee reported that a conference had been held with the Mason Builders Association, when it was reported that the eight-hour day was working satisfactorily to all concerned. — The members of Painters and Decorators Union 236 met and discussed the eight-hour question. Some of the men were in favor of an eight-hour day and \$2.50 a day, while others wanted \$2.70 a day of eight hours. No decided action was taken, as it was decided to wait till after the action of the district council. — The conductors, drivers, and motormen held a very large meeting; the cause of this gathering was a new time table which was issued Saturday, April 8, and which, it was claimed, violated the spirit of the agreement entered into between the president of the road and his employées. By a unanimous vote the question of excessive hours of labor and other grievances was referred to the executive board of the union. Twenty-four new members were admitted.

14th. — A Jamaica Plain carriage manufacturer informed the executive committee of the Carriage and Wagon Workers Union that he would concede the nine-hour day with 10 hours' pay to his employes. — Cigar Makers Union 97 voted to expend \$5,000 in advertising the blue label of the Cigar Makers International Union at the World's Fair. — At a meeting of Tin Plate, Sheet Iron, and Cornice Workers Union, it was reported that many employers had agreed to concede the nine-hour day and a minimum rate of wages of 30 cents per hour. — At a meeting of the Lathers Protective Union, it was voted to fine any member of the union who worked for less than \$3 a day \$5 for every day's offence.

16th. — Another carriage firm granted the nine-hour day.

17th. — At a meeting of the Wood Turners Union, it was reported that every wood turner employed in Boston and vicinity had succeeded in securing a nine-hour work day without reduction in wages.

18th. — The pattern makers of Boston and vicinity, to the number of 80, met and organized the Pattern Makers Union. An executive committee was appointed to visit the different employers of Boston and vicinity relative to granting nine hours at 10 hours' pay.

19th. — Wages and hours of labor were discussed at a meeting of Painters and Decorators Union 236. Some of the men desired to inaugurate an eight-hour work-day, while on the other hand many believed that an effort should be made to raise wages instead of reducing hours. Twelve new members were admitted and 10 proposed for membership.

20th. — The committee of the new painters' union reported that the employers had generally agreed to allow the nine-hour day.

24th. — At a meeting of Abraham Lincoln Assembly 595, K. of L., the passage of the 54-hour bill for women and children in factories was strongly advocated and five new members admitted. — Resolutions were adopted at a meeting of Ben Franklin Assembly 5463, K. of L., calling upon the Legislature to enact a 54-hour bill for women and minors employed in workshops and factories.

26th. — Resolutions were adopted by the members of Machinists Lodge 341, Cambridge, thanking the Barbour-Stockwell Mfg. Co. of Cambridgeport for granting its employes a 54-hour week without reduction of wages.

28th. — At a meeting held under the auspices of Union 236, Brotherhood of Painters and Decorators of America, the move of the painters to secure the eight-hour day was endorsed; as one result of the meeting 10 propositions for membership were handed in. — Painters and Decorators Assembly 4495, K. of L., met and considered the eight-hour question.

30th. — At a meeting of Clothing Operators Union No. 1, of the United Garment Workers of America, it was decided to hold a mass meeting for the purpose of taking action as to whether or not they should make a demand for eight hours and the piece price system. The new official organ of the union, the *Garment Worker*, was received and distributed to the members. — The machinists of Boston and vicinity decided to inaugurate the nine-hour day on June 1. A mass meeting of the trade was held under the auspices of the Machinists Trades Council, and every one of the non-union men present signed a paper which read as follows: "We the undersigned machinists employed in Boston and vicinity, do hereby express our sympathy and promise our support to securing a nine-hour day without reduction of wages; to take effect the first Monday in June." It was stated that out of the 200 shops in Boston and vicinity over 100 had already given in.

### MAY.

1st. — Delegations from Salem, Springfield, and Lynn unions attended the meeting of Bricklayers Union 3. The delegates from Springfield reported that the members of the craft in that city were on strike for the eight-hour day; the strike was endorsed, and the members pledged themselves to support the strikers financially. A discussion was held on the union depot job, which, it was claimed, was being done by unreliable men on the 10-hour basis. The delegation from Salem stated that it was in favor of the eight-hour day and would co-operate with the Boston union in enforcing it on the union depot job, if possible. — At a meeting of the Steam Fitters Union every member declared in favor of reducing their hours of labor to eight per day; it was decided to conduct a course of lectures upon the technical features of steam fitting, under the auspices of the union. — At a meeting of the Machinists Trades Council encouraging reports were received from the different machine shops as to the progress of the nine-hour movement.

2nd. — At a meeting of Hat Finishers Association the nine-hour question was discussed. — The nine-hour day was discussed at a meeting of Garment Workers Unions 1, 25, and 43, and resolutions favoring a reduction of the length of a working day were adopted. — At a meeting of Furniture Workers Union 24, it was reported that a local firm was discriminating against members of the union who waited upon the firm for the purpose of securing the nine-hour

day; the matter was referred to the general organizer for investigation. Twenty-four new members were admitted.

**4th.**—Machinists Union 28 met and listened to reports from the delegates to the Trades Council on the nine-hour movement. The union admitted 11 new members as a result of the nine-hour agitation. The union endorsed the petition to have the government take possession of the telephone system when the patents of the American Bell Telephone Co. expired.—The International Labor Union voted that all shoe operatives in Haverhill should refuse to work Saturday afternoons; every shop's crew in the city sent a delegate to the meeting, and the vote was unanimous.—The Tin Plate, Sheet Iron, and Cornice Makers held a meeting and ratified their demand for 30 cents per hour for nine hours a day, and an increase of 5 per cent for all men receiving over 30 cents an hour, the same to take effect August 1.

**5th.**—Another firm, whose employes are members of Furniture Workers Union 24, conceded the nine-hour day.

**6th.**—The Machinists Trades Council held a meeting and decided to demand that the nine-hour day go into effect June 5.—At a special meeting of the Boiler Makers Union the proposition of the manufacturers to give the nine-hour day on June 1 was accepted.

**7th.**—Bakers Union 4 held a mass meeting, the sense of which was that the bakers of this city should not be compelled to work 17 hours per day when other trades could earn living wages in less than half that number of hours.

**8th.**—It was stated at a meeting of Furniture Workers Union 24 that 43 furniture factories in Boston were running nine hours a day, and that nearly every furniture manufacturer was giving union men the preference when employing new men.—According to reports submitted at a meeting of the Machinists Union, several machine shops had granted the nine-hour day.—The strike of the bricklayers of Springfield for an eight-hour day was unanimously endorsed at a meeting of Bricklayers Union 3, and \$200 appropriated for their aid.—It was decided by the members of Brass Workers Union 33 to demand a nine-hour day, and a committee was appointed to arrange for a public meeting of all employed at the trade to decide upon what date the employers should be asked to accede to the request. The advisability of adopting a trade label was discussed and the cigar makers label was endorsed.—At a meeting of the Hebrew Carpenters Union it was voted unanimously not to accept the offer of steady employment at reduced wages which had been made by the contractors.

**9th.**—At a meeting of the Nine-Hour Club of the Pattern Makers Association, the movement for a reduction of the number of hours per day among the pattern makers of Boston was discussed; the committee having charge of the matter reported that five of the principal firms of Boston had promised to establish a shorter work-day.—At a meeting of Furniture Workers Union, 22 new members were admitted and it was voted to continue the agitation for a shorter work-day.

**11th.**—It was reported at a meeting of the Machinists Trades Council that the nine-hour movement among the machinists promised to reach a successful termination on June 5, as 140 firms had already promised to concede the shorter working day.

**14th.**—The journeymen horseshoers held a public meeting under the auspices of Journeymen Horseshoers Union 5; the advisability of participating in the nine-hour movement was discussed.

**17th.**—At a meeting of Electrical Workers Union 35, the eight-hour day was discussed and 15 new members admitted.

**21st.**—At a meeting of the Central Labor Union delegates from the Salesmen's Union addressed the meeting, and advocated that the delegates from the affiliated bodies assist them in their efforts for more leisure, especially during the Summer months. The meeting voted to render all possible assistance to the Salesmen's Union, and directed its grievance committee to wait upon several of the retail stores, to urge the adoption of the early closing system.—A meeting under the auspices of the Machinists Trades Council was held to advance the nine-hour movement. The committee reported that 21 firms had agreed to put the nine-hour day into force on June 5, without reduction of wages; about 150 firms had agreed to the nine-hour day, but had not set any date for it to go into effect. Delegates representing the lodges connected with the International Association of Machinists met after the mass meeting and decided to take such constitutional action as would give them the entire financial support of the International Association if necessary.

**24th.**—At a meeting of the Steam Fitters Union of Holyoke, it was voted to work only nine hours a day on and after June 5.—The nine-hour day was discussed at a mass meeting of upholsterers. It was decided to form a union of the craft and a full set of officers was elected; a committee was chosen to canvass all the shops in the city in the interest of the movement for a reduction of the hours of labor.—At a meeting of the Pattern Makers Nine-Hour Club it was decided to work but nine hours per day on and after July 2.

**26th.** — At a meeting of Journeymen Horseshoers Union 5, the following demands were formulated and presented to the master horseshoers of Boston and vicinity :

" We, the members of the Journeymen Horseshoers Union 5 of Boston and vicinity, demand that on and after Monday, June 5, 1893, nine hours shall constitute a day's work for five days and eight hours on Saturday, without reduction of wages. Fifty cents per hour overtime from Nov. 1 to April 1. No man to work any overtime from April 1 to Nov. 1."

**27th.** — The factory officials at the Thomson-Houston works held a protracted meeting of one and one-half hours with the committee chosen by the employes to represent them in the movement for 54 hours' weekly labor. The committee reported that the management had conceded 56 hours' pay for 56 hours' work; hours of service to be as follows: For the first four days of the week from 6.45 A.M. to 6 P.M. with one hour for dinner; Friday from 6.45 A.M. to 5.30 P.M. with one hour for dinner; Saturday from 6.45 A.M. to 12 M. The committee as a whole were in favor of the proposition.

**29th.** — At a meeting held under the auspices of the United Garment Workers of America fully 600 employes of the various mackintosh shops throughout the state assembled, large delegations of men and women being present from Cambridge, Hudson, Woburn, Reading, Braintree, and Hyde Park; the subject of shorter hours and higher wages was discussed. Five new local unions were formed and about 350 operatives joined the several bodies.

**31st.** — It was reported at a meeting of the Pattern Makers Association that the nine-hour demand, which was to be enforced on July 3, had been granted by 20 manufacturers who employed 49 per cent of the craft. The committee in charge reported that there was every possibility of the demand being conceded without a strike.

## JUNE.

**2nd.** — At a meeting of Journeymen Horseshoers Union 5 it was decided that every journeyman horseshoer whose employer had not complied with the demands of the union for shorter hours should strike on June 5. The committee which had been previously appointed to visit the various firms reported that several of them had granted the request, and that a number of others were willing to comply with the demands, provided they were universally complied with in every shoeing forge in Boston and vicinity. It was decided to enlarge the committee so as to visit the various forges, that every employer might be given another opportunity to avoid a strike.

**4th.** — At a meeting of Building Laborers Union 6 resolutions were passed to the effect that there was no honorable way that the present agreement for an eight-hour day with the master masons could be broken, and that the union would continue to abide by that agreement and would not enter into any alliance with any other organization to change its terms. — Abraham Lincoln Assembly 595, K. of L., adopted resolutions requesting the health department officials to grant the Saturday half-holiday as was the case with other departments. The label of the mattress makers was endorsed. — Boston machinists adopted new tactics to secure the nine-hour day at a meeting of that craft. Inasmuch as but 25 firms, employing about 1,000 men, were reported as having granted the nine-hour day, the meeting refused to order a general strike, but decided to take one shop at a time until nine hours was recognized as a full day's work in Boston and vicinity.

**7th.** — Several more firms granted the demand of the Horseshoers Union 5 for nine hours a day.

**11th.** — The agitation for a Saturday half-holiday was the principal matter of business at a meeting of Ben Franklin Assembly 5463, K. of L.

**25th.** — The employes of the street cleaning division of the health department of Boston held a mass meeting at which a protest against the action of city officials in refusing to grant them a Saturday half-holiday was considered. A committee was appointed to secure Faneuil Hall in which to hold a public indignation meeting. — Union 6064, American Federation of Labor, composed exclusively of health department employes of Boston, was formally organized and officers installed. A discussion was held on the question of requesting the superintendent of streets to grant the Saturday half-holiday.

## JULY.

**2nd.** — At a meeting of the Machinists Trades Council the delegates from East Boston stated that every master machinist, with but one exception, had agreed to nine hours with 10 hours' pay. Relative to the Sturtevant Blower Works it was reported that the managers had concluded to open a free shop July 5, and invited their employes to return to work under the 10-hour rule. After consulting with the men on strike the council voted that the strike should be continued until nine hours without reduction of wages had been conceded.

**5th.** — At a meeting of the Pattern Makers Association it was stated that 160 out of the 200 pattern makers employed in Boston and vicinity had secured the nine-hour day without reduction of wages.

**6th.** — It was reported at a meeting of Branch 10 of the Boiler Makers Union that the boiler manufacturers of Holyoke had agreed to give their workmen the nine-hour day without reduction of wages on and after August 1.

**9th.** — About 150 paper mill operatives of Holyoke held a meeting for the purpose of discussing the question of abolishing the Sunday night working requirement, and making the week's work begin at 7 o'clock Monday morning, as it does for the other employes of the mills, instead of at 12 o'clock Sunday night. The operatives had appealed to the paper manufacturers in convention and to the Legislature without success and had finally tried personal appeals. It was reported that of the 26 paper manufactories in Holyoke, 21 had acceded to the request, three had refused, and two were uncertain. The union reported that a ways and means committee had been appointed who would guarantee \$10 a week to each engineer or machine tender and \$5 a week to each back tender who should lose his situation by reason of giving his support to the movement, the money to be paid until the man, whether a member of the union or not, should get employment again.

**11th.** — A meeting of the dry goods clerks of East Boston was held for the purpose of organizing the men so as to secure more uniformity of system and to procure shorter hours during the heated term; about 50 names were placed on the roll. — The demand of the Boston Brewery Coopers Union for an advance of 50 cents a day in wages was unanimously endorsed at a meeting of L. A. 4956, K. of L., and the assembly voted to assist the coopers financially in case trouble should occur as a consequence of the request. — According to the reports submitted by shop stewards at a meeting of the Brass Workers Union, 10 firms of brass manufacturers had granted their employes a nine-hour day, and more had promised to do so providing their principal competitors would do likewise. The brass workers employed at the Sturtevant Blower Works were admitted to the union. — At a meeting of the Furniture Workers Union the nine-hour system was discussed.

**13th.** — At a meeting of Local Union 9 of Carriage and Wagon Workers reports were read regarding the struggle made by other unions in the State to secure the nine-hour day.

**15th.** — At a meeting of the union carpenters of Boston it was announced that the eight-hour day would go into effect Nov. 1.

### AUGUST.

**2nd.** — Boston Typographical Union, by a vote of 543 to 82, placed itself on record in favor of the nine-hour day on Nov. 1, and the levying of an assessment by the executive council to support those who are required to strike for it.

**5th.** — At a meeting of the Carpenters State Council a movement to agitate for eight hours for carpenters in the cities around Boston was inaugurated and the vote to begin the agitation for the eight-hour day was adopted unanimously.

### SEPTEMBER.

**4th.** — The nine-hour proposition was rejected by the International Typographical Union, as only 7,927 members voted in favor and 6,464 against, a three-fourths majority being required to carry it. — At a meeting of the Central Labor Union a special committee, appointed for that purpose, reported having waited upon the horseshoeing firm of Pillow & Watson, who finally agreed to adopt the nine-hour day five days in the week, with eight hours on Saturdays.

**17th.** — At the semi-monthly meeting of Boiler Makers Union 10, reports from the national officers showed that in 19 cities the nine-hour day had been secured, and it was expected that by April 1, 1894, the shorter work-day would become general in all boiler making centres. The organizing committee was instructed to form a local union of the craft in Holyoke.

**28th.** — At a meeting of the lathers it was resolved that eight hours would constitute a day's work, beginning Nov. 1.

### OCTOBER.

**1st.** — At a meeting of Boston Central Labor Union the delegates from the Coal Handlers and Teamsters Union stated that their employers often sent coal out for delivery after 6 P.M., which made it late when the men returned, and for which they did not receive any extra compensation. It was decided not to purchase any coal where the teamster does not hold a union card, and not receive any coal sent out after 5 P.M. It was also voted to refuse to purchase cigars unless the blue label of the Cigar Makers International Union was on the box.

**2nd.**—Last June an agreement was entered into between the Journeymen's Union and the Master Horseshoers Association whereby, in consideration of the association granting the nine-hour day, the journeymen would stand by the advance in prices for shoeing made at the time by the masters. In this agreement it was decided that no union horseshoer would work for any employer who took work under the bill of prices. In accordance with that agreement Journeymen Horseshoers Union No. 5 called out three of its members from the shop where the fire commissioners had had the department horses shod since their refusal to accede to the demands of the masters for an advanced price for the work. The union pledged the strike benefit to the men who went out. A committee was appointed with instructions to visit the commissioners and the mayor and ask for an adjustment by having the horses shod in union shops. The meeting also endorsed the position of the United Garment Workers in their controversy with the Clothing Manufacturers Association, and resolutions were passed pledging the members to purchase no clothing that does not bear the white label. — The Lasters Union succeeded in establishing a nine-hour day in Lynn; in the several shops where the union did not control, the men applied for the reduction and were granted it.

**7th.**—At a meeting of the Boston Cloth Hat and Cap Makers Union it was reported that a firm had conceded the nine-hour day and an increase of \$1 per week; new officers were elected and eight new members admitted.

**12th.**—At a meeting of the Lathers Protective Union it was decided to demand the eight-hour day on and after the first Monday in November, and the members expressed themselves willing to accept a reduction of 50 cents per day in order to accomplish their demand. — A union of journeymen framers was organized with 40 members, and officers elected and installed. — At a meeting of the Tin Plate, Sheet Iron, and Cornice Workers Union it was decided that the tinsmiths affiliated with the organization should request their employers to grant the nine-hour day, with eight on Saturday, on and after Nov. 6, with a minimum rate of wages of \$3 per day.

**25th.**—A meeting of carpenters was held to protest against the action of the Master Carpenters Association in refusing to live up to its agreement entered into last August, that eight hours should constitute a day's work after Nov. 1. Resolutions were introduced and adopted condemning the manufacture of shirts in the State Prison because of the number of women wage-workers who were displaced and deprived of their only means of a livelihood thereby.

**26th.**—On and After Nov. 1 the eight-hour work-day will go into effect among the lathers and it was reported at a meeting of the Lathers Union that only two firms were against granting the demand of the union and both firms were declared non-union by the meeting.

## NOVEMBER.

**5th.**—At a special session of the Tin Plate, Sheet Iron, and Cornice Workers Union, its business agent was instructed to call off all men in the trade who were not working under the union rules of nine hours and \$3 per day.

**6th.**—All the union painters of Boston went to work to-day on the eight-hour system but at the same rate of wages per hour as before. The men were willing to agree to this if by so doing they could secure the permanent adoption of the eight-hour day.

**9th.**—At a meeting of the Lathers Protective Union resolutions were adopted commending the American Brewing Co. for standing by Brewers Union 14. The action of the Knights of Labor in seeking to blacklist the secretary of Brewers Union 14 was condemned. Two more shops were reported as having conceded the eight-hour day for lathers.

**10th.**—The furnace and stove dealers of Boston agreed that on and after Monday, Jan. 1, 1894, nine hours should constitute a full day's labor for all tin and sheet iron workers in their employ.

**13th.**—At a meeting of Building Laborers Union 15 the strike of the tinsmiths for a nine-hour work-day and a minimum rate of \$3 per day was endorsed. Resolutions were adopted protesting against letting municipal building work out by contract, as being detrimental to the interests of taxpayers and citizens employed in the building trades.

**24th.**—At a meeting of Harmony Lodge of Machinists the advisability of establishing a nine-hour club of machinists, for the purpose of agitating the adoption of the nine-hour work-day in that trade in the spring of 1894, was discussed.



**WAGES.****JANUARY.**

**1st.** — The 1893 agreement between the West End Street Railway Company and its motormen, conductors, and drivers was made public. These clauses are of interest:

"Ten hours' work, to be done in twelve consecutive hours, so far as is practicable, never to exceed ten hours and twenty minutes in twelve consecutive hours, shall constitute a day's work for all conductors and drivers on regular cars.

"The time elapsing at the end of the routes between schedule and allowed time, commonly called 'lay offs,' and also the time consumed in running from the car house to starting point of line, commonly called 'pull outs,' and vice versa, shall be considered as part of a day's work, to be paid for at regular rates. This applies to both regular and extra men.

"Conductors, drivers, and motormen of regular cars shall be paid at the rate of \$2.25 per day.

"Drivers and conductors of all cars starting before 5.30 A.M. to have one half hour for breakfast, which shall not be considered as platform work, and these and all other conductors and drivers to have at least one hour, and, so far as practicable, one hour and thirty minutes for dinner, said time to be fixed as near the middle of the day's work as is practicable.

"Regular men having no Sunday time, when compelled to report, shall be paid for the time they are held at the station.

"No employé's position as conductor or driver will be held for him longer than thirty days; unless he is sick or otherwise employed by the company.

"When working on snow ploughs or levellers, drivers of six-horse teams and motormen driving on electric ploughs shall be paid at the rate of 35 cents per hour. Drivers of four-horse teams shall be paid at the rate of 30 cents per hour.

"Conductors, motormen, and drivers shall at all times, while on duty, wear a full regulation uniform suit and cap.

"No official in the employ of the company shall be allowed to keep boarders, lodgers, or engage in any business in which he may receive compensation from a driver, motorman, or conductor, when attention has been called to it.

"All service upon the cars of this company shall be governed by such rules and regulations as the management may from time to time establish."

At a meeting of Building Laborers Union 1, it was voted to arrange a scale of prices and hours with the Mason Builders Association for the year.

**6th.** — How to raise the scale of wages in this city was the subject under discussion at a meeting of Local Union of Shirt Makers. Reports were read from New York, Chicago, Philadelphia, Leominster, Fitchburg, Natick, and Watertown, giving the scale of prices paid in each place.

**17th.** — The efforts of the wood turners of Boston to raise the minimum rate of wages from \$15 to \$18 per week were endorsed at a meeting of Wood Turners Union. To secure the contemplated advance a committee was chosen with directions to thoroughly organize the trade throughout the city and vicinity.

**22nd.** — Union 5066, A. F. of L., took action concerning the trouble in the works of the Boston Gossamer Rubber Co. at Hyde Park. In 1892 an agreement was made on a scale of wages which was to remain in force until May, 1893. It was stated that, during the past week, the men were notified that they must make a certain garment for 50 cents, for which they had previously been paid 70 cents; some of the men objected and were discharged. The union claimed that they were discharged unjustly, and proposed to make an effort to secure the reinstatement of the men and a restoration of the schedule price.

**FEBRUARY.**

**6th.** — Local Union 14 of the National Brewery Workers Union stated that the following agreement, to run for one year from March 1, had been entered into with the master brewers of Boston:

"1. Ten hours shall constitute a day's work.

"2. Sunday work shall be suspended, unless absolutely necessary, and 35 cents per hour shall be paid; 35 cents per hour shall be paid on week days for overtime.

"3. The Sunday watchman shall be paid \$2.

"4. \$14 per week shall be paid to men in the washhouse. Cellarmen, fermentingmen, kettlemen, and the first men in the washhouse shall be paid \$16 per week. First cellarman, first kettlemen, and first fermentingman shall be paid \$18 per week.

"5. None but union men shall be employed, and they shall present their union card when seeking engagement. As far as possible application for help should be placed with the secretary of the union. No man shall be employed on the recommendation of a saloon keeper.

"6. Each man shall be entitled to free beer through working hours as heretofore.

"7. No workingman shall lose his position through sickness inside of three months.

"8. Every legal holiday shall be observed, such as Fourth of July, Labor Day, etc., and such days as may be set by the Governor.

"9. No employé shall be discharged without sufficient cause. The following shall be sufficient causes for discharge: Repeated drunkenness, carelessness in the work, and non-obedience against the orders of the boss or foreman.

"10. In case of slack business, the foreman has the right to lay off men each week, and the men laying off one week shall be given work the next, and others laid off, except the first men, viz., cellarman, kettleman, and fermentingman.

"11. Pay days are to be weekly. No man shall refuse to work overtime when asked by the foreman, if pay is guaranteed.

"12. Difficulties which may arise between the workmen and the bosses shall be referred to an arbitration committee, consisting of six members, which are to be elected by the workmen and bosses. These six shall then appoint a seventh disinterested party."

The Central Labor Union unanimously indorsed the bill before the Legislature compelling contractors having contracts for public work to pay laborers at least \$2 a day. — At a meeting of Steam Fitters Union a new scale of wages for the coming season was discussed.

7th. — The Buffers and Beaters-out Assembly, Knights of Labor, held a meeting for the purpose of taking into consideration the existing state of affairs regarding wages in the shoe factories of Harney Bros. and Corcoran & Callahan, both firms having refused to conform to the wishes of the union. After some discussion it was decided to refer the whole matter to the boot and shoe council.

14th. — At a meeting of Tin Plate, Sheet Iron, and Cornice Makers Union it was voted to demand 30 cents an hour and a nine-hour work-day after August 1.

16th. — Cutters Assembly, K. of L., Haverhill, adopted a new price list, asking for an increase of 25 cents per day, and the list was submitted to all the leading manufacturers in Haverhill, who were given one week to consider the proposition.

17th. — In the case which was submitted to the Board of Arbitration in the trouble between Martin & Hardy and Lasters Union 100 of Haverhill, the following report was made:

"In the case submitted to the executive committee of the joint Board of Conciliation and Arbitration by Martin & Hardy, the committee makes recommendations to their objections to a price list presented to them by the International Union as follows:

"Objection 1 — To paying 3½ cents per part for lasting and beating-out white canvas goods. Recommendation 1 — The price remain as at present, 3½ cents per part, until July 1, 1893, when price be changed to 3¾ cents per part.

"Objection 2 — To have their No. 16 last called square toe. Recommendation 2 — That the No. 16 last of above form should not be called square toe.

"Objection 3 — To paying ¼ cent per pair extra for laster and beater-out for cutting linings on work where 3 cents per pair or less is paid on each part. Recommendation 3 — That if workmen are required by the firm to cut linings ¼ cent per pair be paid for same; but if workmen cut linings from preference, they may do so and the firm not be charged for same.

"Objection 4 — To have their No. 544 last classed as peaked toe. Recommendation 4 — That the No. 544 last should not be classed as peaked toe.

"Objection 5 — To paying 4 cents per pair for lasting and beating-out men's nullifiers. Recommendation 5 — That the price remain as presented, 4 cents per pair for lasting and beating-out men's nullifiers."

20th. — At a meeting of the local K. of L. shoe cutters of Haverhill it was decided to submit their present disagreement over the price to be paid per week to the Board of Arbitration.

### MARCH.

2nd. — At a meeting of Machinists Union 28 the delegates to the Central Labor Union were instructed to bring the attention of that body to the alleged violation by two firms, in the machinery trade, of the weekly payment law, and also the system of docking, whereby a man five or ten minutes late was docked a quarter of a day.

3rd. — The granite workers in the Knights of Labor at Quincy, through their delegates, complained that their employers were violating the weekly payment law and doing all in their power to build up what is called the truck system, by giving orders on stores instead of paying cash. The alliance referred the matter to the legislative and grievance committees, and adopted



resolutions pledging the Knights of Labor to break up what, from their point of view, was an iniquitous system.

12th. — How to obtain nine hours' pay for eight hours' work was the subject discussed at a meeting of Building Laborers Union 15. The laborers declared that they could not afford to lose one hour's pay, but many doubts were expressed as to their getting more than the eight hours' wage, inasmuch as the bricklayers and plasterers had sacrificed an hour's pay in order that they might secure an eight-hour day. — It was reported by the joint executive board of Pant Makers Unions 12 and 41 at a meeting of both unions, that several of the contractors were, owing to the intercession of clothing manufacturers, paying wages more promptly and in other ways treating their employes better.

13th. — A charge was made at the meeting of the Boston Central Labor Union by members of Machinists Union 28, that a local machine company was evading the weekly payment law, and it was also affirmed that a system of fining had been inaugurated which was considered very unjust, as a man was docked for a quarter of a day, although he might be but a few minutes late in the morning or afternoon. It was said that, after the grievance committee had conferred with the officers of the corporation, the employes were called into the office, one at a time, and each presented with a slip, which requested the company to pay him his wages the first Monday of each month. Thinking that a refusal to sign meant loss of employment, all, with three exceptions, signed the request. The three men who refused were discharged. — At a meeting of Carpenters Union 33 it was decided that before any demands were made upon the employers for more pay, that it would be advisable for them to get into their organization every member of the craft in Boston and vicinity. With that idea in view they voted to reduce the initiation fee to \$3 for a short period.

15th. — The Building Laborers Union was organized May 10, 1886. Since that time wages were said to have been increased from \$1.75 per day of nearly 11 hours to \$2.25 per day of nine hours and eight on Saturday.

16th. — The Board of Arbitration held a meeting at Haverhill for the purpose of hearing the report of the special committee appointed to visit the shoe cities in this vicinity and ascertain the prices paid cutters, with the aim in view of settling the difficulty between the K. of L. cutters and the manufacturers. It was reported that the shoe centres had been visited and that the wages paid were: In Peabody, Danvers, Salem, Amesbury, and Newburyport, \$10 to \$15; Lynn, \$17. The Board recommended that the new prices be: First-class outside cutters, \$16; first-class lining cutters, \$15; trimming, \$12. The manufacturers were to decide what constituted a first-class cutter.

22nd. — At East Cambridge, Coopers Assembly 4956 held a mass meeting in the interests of organization. It was proposed to make a demand for less hours of work or more pay.

29th. — The members of the Master Plasterers Association held a meeting and after considering the demand of the Plasterers' Tenders Union for \$15 per week for a working day of eight hours, concluded to offer the mortar mixers and carriers the following compromise proposition as a basis of settlement: "The master plasterers of this city will pay tenders \$15 per week, the day's work to begin at 7.30 A.M. and end at 5 P.M. on five days of the week, and on Saturday work to cease at 4 o'clock." The contractors stated that they did not wish to cut wages, and made this offer in order that full wages could be paid without loss.

31st. — At a meeting of Tin Plate, Sheet Iron, and Cornice Makers Union resolutions were passed that after August 1, 1893, a standard of wages should be established by a minimum rate of not less than 30 cents per hour, nine hours to constitute a day's work, and that all men being paid that amount or over before the above date should receive an increase of 5 cents an hour.

## APRIL.

6th. — At a meeting of the committees representing the employing and employed plasterers of Boston and vicinity an agreement was drawn up and signed by representatives of both sides, specifying that the rate of wages should be 43 cents per hour for eight hours per day for five days of the week and seven hours on Saturday. The agreement was to stand for one year and union plasterers only to be employed.

8th. — At a meeting of the Carpenters City Council the question as to whether or not it was advisable to ask for an advance of 25 cents a day in wages was discussed, with the result that it was decided to hold a mass meeting of the craft at an early date. — The knee-pant makers of Boston held a meeting for the purpose of stating their grievances regarding wages and hours of labor and to consider the advisability of forming a union. At the conclusion of the speaking a union was founded under the jurisdiction of the United Garment Workers Association.

17th. — At a meeting of the Seamen's Union the delegates reported that they were on strike for an advance of 20 per cent in their wages. It was stated that the men on the training ship

Enterprise were not receiving the union scale of wages, and a committee of three was appointed to secure, if possible, the union rate of wages. — It was decided by the union carpenters of Boston to demand an increase of wages for the building season of 1893. The non-union carpenters were reported to be joining with the members of the unions in this matter. The carpenters employed in Boston favored an advance of wages more strongly than an eight-hour day.

24th. — The necessity of establishing a uniform standard of wages was considered at a meeting of Pant Makers Union 54. It was claimed by several speakers that no two contractors were paying the same wages for given quality and quantity of work. A price list was drawn up and presented to the contractors. — At a meeting of Hebrew Carpenters Union it was reported that nearly all the Hebrew contractors had conceded the demands of their workmen for \$2.50 per day of nine hours.

28th. — At a meeting of Cigar Makers Union 97 it was unanimously voted to grant permission to Union 192 of Manchester, N. H., to strike, if necessary, in order to enforce its demand of \$1 per 1,000 for hand work and 50 cents per 1,000 for mould work. The same action was taken upon a similar request of Union 304 of Racine, Wis.

### MAY.

2nd. — Carpenters Union 561 endorsed the position of the trade council in its effort to secure an advance in wages for the members of the craft. — L. A. 6627, K. of L., composed of stablemen, held a meeting at which the committee previously appointed to try and secure an increase in wages made a favorable report.

3rd. — At a meeting of Pant Makers Union 54 the strike of the knee-pant makers for an advance of 15 cents per dozen was endorsed.

4th. — At a meeting of the Longshoremen's Provident Union it was decided to demand double pay for all work performed between 12 and 1 o'clock. A sum of money was paid out in sick benefits and seven new members were admitted.

15th. — At a mass meeting of Carpenters Union it was decided to demand 35 cents per hour. — At a meeting of the stablemen it was reported that several stables had conceded the \$11 per week demand. — Complaints that the clothing trimmers were being reduced in their wages through the apprentice system as operated by the employers of Boston, were considered at a meeting of Clothing Cutters and Trimmers Union, and a committee was chosen to visit the various clothing factories in the city.

21st. — Building Laborers Union 6 held a meeting and discussed the action of Local Union 15 in making a demand for 30 cents an hour. The union voted to have nothing to do with the movement as it had a contract with the Master Builders and was satisfied.

25th. — At a meeting of Stablemen's Assembly, the executive board reported that the agitation for more pay was progressing rapidly.

### JUNE.

4th. — At a meeting of the Wood Turners Union it was decided that the wood turners of Waltham should demand that 28 cents per hour be paid them on and after Monday, June 5.

6th. — Painters and Decorators Union 11 held a meeting and endorsed the petition of the Central Labor Union asking that the city painting be done in a union shop. The meeting was also informed that a painter of Brookline, who had been paying union rates, had gone back to \$2.50 a day, and, as a consequence, 18 men had struck, and their action was endorsed by the meeting.

25th. — At a meeting of the executive committee of the Hebrew Shirt Makers Union and the officers of the Garment Workers it was reported that in one factory in Boston prices for making shirts were lower than were paid in any city in the United States, and cases were quoted where men and women were unable to earn more than \$6 per week when business was at its best. It was voted to hold a special meeting for the purpose of thoroughly organizing the Hebrew shirt makers of Boston.

### JULY.

2nd. — Typographical Union 13 met in special session and agreed to the use of "plate matter" with the proviso that all compositors should be paid \$21 a week for eight hours' day work and \$25 a week for seven hours' night work.

6th. — At a meeting of women compositors resolutions were adopted condemning the alleged discrimination against their sex in the matter of wages. — Representatives from the Brewery Workers Assemblies 2108 and 858 K. of L. held a conference with J. W. Kenney of the Park

Brewery which resulted in the schedule of wages and hours of labor recently adopted by the above assemblies being signed by Mr. Kenney. — At a meeting of the Lathers Protective Union it was reported that every firm in Boston and vicinity, with the exception of one in South Boston, had advanced the \$3 men to \$3.50 and the \$2.50 men to \$3.

10th. — A delegation from the Brewery Coopers Union waited upon every master brewer in Boston and vicinity and presented the new schedule of wages recently adopted by the union. For a number of years the standard rate of wages in this craft had been \$3 per day. The new price list called for an advance of 50 cents per day, and the committee notified the employers that the advance must go into effect on and after Saturday, July 15.

12th. — It was stated at a meeting of the Painters Union that a master painter had discharged a number of union men who had been in his employ from three to seven years, and that he was employing non-union men in their stead and paying them below the union rate of wages. This, it was claimed, was unfair to other employers who were paying union wages, and it was decided to place the matter before the painters' district council for action. The report of the walking delegate showed that over 15 non-union men had joined the organization during the past week and that 25 applications for membership had been accepted. — At a meeting of the executive board of the Pant Makers Union complaint was made that a Boston contractor who refused to pay his eight employes their wages last week, aggregating \$90, had transferred his business to his son-in-law, and that the employes were thereby unable to secure their pay. It was claimed that certain wholesale houses had been waited upon and informed of the contractor's action, but without effect, as the firms continued to give him work. It was decided to place the matter before the Clothing Trades Council, and request it to take such action as would secure to the employes their wages. — At a meeting of the Fresco Painters Union the matter of asking for an advance in wages was considered.

17th. — The request for an advance of 50 cents a day was granted the brewery coopers by several firms. — At a meeting of Central Labor Union, delegates from the Shirt Makers Union stated their grievances against a manufacturer who three weeks ago locked out 28 of his employes. They stated that this contractor, as soon as he learned that the shirt makers were organizing, demanded that each of his employes should deposit \$10 with him which should be forfeited if they left his employ without giving 14 days' notice, or if any of them went out on strike; also that they should have nothing to do with the union. It was claimed that this requirement of a deposit of \$10 was extremely severe, as the wages, even of married men, did not run above \$8 per week, and in some instances were not above \$4 per week. The Central Labor Union donated \$30 to the locked-out people, and appointed a committee to solicit funds.

31st. — At a meeting of the Portable and Hoisting Engineers Union, a negative answer was received from the Master Builders Association to a communication asking for an advance in wages. It was voted to have the secretary wait upon the employers individually and endeavor to gain what was wanted.

### AUGUST.

7th. — The notification of a reduction of 10 per cent in wages of employes at several hotels was taken under consideration at a meeting of the Waiters Alliance.

17th. — Typographical Union 13 held a special meeting and discussed the rate of wages to be paid for work upon the new type-setting machines.

29th. — At a meeting of the representatives of the different mills in New Bedford it was decided to reduce wages 10 per cent, and that the revised wage schedule should go into effect Monday, Sept. 11, in all the cotton mills.

### SEPTEMBER.

3rd. — At a meeting of the New Bedford Weavers Protective Association it was decided to appoint two delegates to attend the Fall River Weavers Union to see if some concerted action could not be taken in the matter of a cutdown. — At a meeting of Boston Lodge 57 of the Brotherhood of Locomotive Firemen, the 10 per cent reduction on the New York & New England R.R. was discussed.

5th. — At a meeting of the Spinners Union in New Bedford the notice of a reduction in wages was discussed. It was decided to appoint a committee of six to confer with the manufacturers to see if some compromise could not be effected. The committee was instructed to report to a special meeting of the spinners sometime before Monday, Sept. 11, and if the committee did not have time to report before then, the spinners were instructed not to go to work Monday.

8th. — At a meeting of the Mule Spinners Association of New Bedford the committee of conference with the manufacturers reported that it had agreed to compromise on a 10 per cent

reduction. After a discussion on the reduction a vote was taken and although the majority of those present voted in favor of not accepting the cutdown, it required a two-thirds vote to order a strike, and the reduction was therefore accepted. — Eight of the largest manufacturers in the cigar industry in Boston formed a combination to reduce the price of labor in the manufacture of cigars. At a meeting of Cigar Makers Union 97 a communication was read from these manufacturers asking for a committee from the union to meet a like committee from the manufacturers, with a view to agreeing to a reduction on the present price for the manufacture of cigars. After debate a committee was appointed.

11th. — At a meeting of the Journeymen Steam Fitters Union it was reported that the Master Steam Fitters Association had agreed to the shop rules, including the following provisions: "That the masters employ only union men; establish a uniform rate of wages; pay the board of journeymen on out-of-town jobs; overtime to be paid for at double rates; apprentices to serve two years; to be but one apprentice for every six journeymen; and that union men work for none but members of the masters' association."

17th. — Scale of prices was discussed at a meeting of Typographical Union 18.

22nd. — The button-hole operators of Lynn held a meeting and formed a new assembly of the Knights of Labor with 57 charter members. The object of the assembly was to prevent further reduction in the prices paid for button-hole work. — At a mass meeting of mill operatives in Lawrence, the reduction of wages in the mills was characterized as undeserved. About 75 names were secured toward the formation of a union.

23rd. — A shop meeting of weavers in the Hathaway Mill, New Bedford, was held to discuss the fining system and the cutdown. A committee conferred with the mill management, and the superintendent agreed, in the future, to warn weavers the first time of any bad work, fine them the second, and discharge them the third.

27th. — A meeting of the Master Horseshoers Association was held to take action regarding the stated refusal of the fire commissioners to pay \$8 per horse for shoeing.

### OCTOBER.

3rd. — At a meeting of the chimney blowers connected with the Idle Union Glass Factory at Cambridge, it was decided not to accept the reduction of 15 per cent which had been offered as the condition upon which the factory would resume work.

7th. — At a meeting of the mule spinners of Lowell the recent cutdown in wages was the subject of discussion. The reduced figures in the various mills were compared and averaged, and it was stated that the average reduction would amount to 8 per cent.

27th. — At a meeting of the executive committee of the Spinners Union, Lowell, a communication was received from the State Board of Arbitration regarding a reduction in wages at the Massachusetts Mills; the communication stated that the reduction made in the spinners' wages was about 8 per cent. The objection to the cutdown was that, even prior to the reduction, they were paid less, spindle for spindle, than the spinners employed in New Bedford, Nashua, and other manufacturing cities.

### NOVEMBER.

1st. — The Hatters Union of Boston presented a bill of wages to the hat manufacturers which called for an increase; the manufacturers, with one exception, conceded the demand.

6th. — At a meeting of Moulders Union, Holyoke, it was reported that the difficulty between that body and the Holyoke Machine Co. and Deane Steam Pump Co., on account of a reduction in wages, had been amicably settled and that the reduction would continue until the revival of business.

10th. — Every member of Harmony Lodge 392 of the International Association of Machinists was present at a meeting to take special action on the contest being waged by the organization against the firm of Armour & Co. of Kansas City. A communication from the general officers was read, stating that a cutdown had occurred at the establishment of the above named firm. This communication was discussed at length by the meeting. It was unanimously voted to assist in every way the local union of Kansas City in compelling the restoration of wages.

### DECEMBER.

31st. — The citizens' relief committee was criticised at a meeting of D. A. 30, K. of L., because men were being paid less per day for work than is paid those regularly employed upon the same jobs. This practice, it was claimed by the delegates who spoke, led to the cheapening of labor. Resolutions were adopted protesting against a continuation of the practice.

## TRADES UNIONS.

[The Trades Union meetings referred to hereinafter took place in Boston unless some other city or town is specifically mentioned.]

## JANUARY.

**2nd.** — At a meeting of Freight Handlers Assembly No. 8702, K. of L., eight new members were admitted. — At a meeting of Water Works Assembly No. 479, K. of L., six new members were admitted. — Stair Builders Union 545 elected officers and voted a sum of money to aid the locked-out men at Homestead. — Carpenters Union 33 levied a 2 per cent per capita tax on its membership for the purpose of supporting the district council. The initiation fee was raised to \$5.

**3rd.** — The sum of \$50 was appropriated at a meeting of Pressmen's Union to the fund in aid of the idle men at Homestead. Several amendments to the constitution were adopted and six new members admitted.

**4th.** — At a meeting of Machinists Union 1, the international organizer addressed the members on the benefits of organization, and afterward the union was admitted to the international body.

**5th.** — At a meeting of the United Garment Workers of Boston a boycott was placed upon the products of a certain firm whose goods were claimed by the officials of the union to be the product of non-union labor.

**7th.** — It was the desire of the journeymen and merchant tailors of Boston that the amount of clothing that a visitor to Europe or an emigrant could bring into this country as personal property should not exceed \$100 in value, and a communication from the Merchants Exchange of Boston requesting the union to take action on this matter was discussed. A committee of two was appointed to co-operate with the members of the Merchants Exchange in presenting to Congress a bill to meet the wishes of the tailors relative to the importation of foreign manufactured clothing.

**11th.** — At a meeting of Fishermen's Protective Union 5909, A. F. of L., it was decided to affiliate with the Boston Central Labor Union.

**12th.** — The South Boston Hat Finishers Association held a special meeting to take action on a large accession in membership. It was stated that, so well regulated were the trade matters of the association that it met once only in every three months, but as all the employes of a large hat factory in Cambridge desired to join the union the special meeting was called, and it was voted to accept 50 of those applying for membership. Two resolutions submitted by the International Association were rejected.

**13th.** — As a compliment to the Shirt Makers Protective Union the Street-Car Men's Union 3873, A. F. of L., sent tickets to every member of the union for their annual ball. The secretary was directed to convey the thanks of the organized shirt makers of Boston to the union conductors, drivers, and motormen for the first official recognition by a labor union of the existence of a working women's union. — At a meeting of the Boston Waiters Alliance the following resolution was adopted:

"Whereas, the Boston Waiters Alliance have learned with deep regret of the sudden death of Gen. B. F. Butler, Resolved, that in his death we mourn the loss of one who was ever ready to assist the working men and women." Twenty-two members were admitted, and the advisability of joining the National Waiters Alliance was discussed, but final action was postponed. — At the quarterly meeting of the Hat Finishers Association, 50 new members were admitted and the labels of the various trades were endorsed.

**14th.** — At a meeting of Cigar Makers Union 97 the following resolutions were passed: "Whereas, the Lasters Protective Union have adopted a blue label to designate union-made shoes, Therefore, be it resolved, that we purchase no shoes for ourselves, wives, or children unless they bear the blue label of the Lasters Protective Union; and be it further resolved, that as long as the difficulty remains unsettled we refuse to patronize any shoe store that sells unlabelled goods, and be it resolved that these resolutions be spread on a separate page of the records and be given to the press."

**15th.** — At a meeting of Pant Makers Union 1, it was voted to donate \$100 to the idle men at Homestead. — The Abraham Lincoln Assembly K. of L. was organized with 20 charter members.

**17th.** — L. A. 6627, Knights of Labor, held a meeting and voted to withdraw its delegation from the Central Labor Union, because, it was stated, the Central Labor Union had censured the district assembly of the Knights of Labor for interfering with the prerogative of the Lasters Protective Union. — The amount of arsenic contained in colors, leads, oils, and other materials

used by house painters and decorators, and the danger to health through the use of products containing arsenic, were the subjects discussed at a meeting of the Massachusetts Master House Painters and Decorators Association, with the result that a committee was appointed to collect data bearing upon the subject in order that the painter and decorator may be possessed of necessary knowledge upon this important matter. Considerable attention was also paid to the employers' liability law; during the discussion upon this subject it was stated that any employer, under the terms of this law, lending a rope, ladder, or other implement, was liable for all accidents occurring through breakage of the article loaned while in use. It was therefore decided, as a measure of protection, not to lend ropes, ladders, staging, or other articles liable to breakage. — At the semi-annual convention of the Massachusetts State Assembly, Knights of Labor, the work of the State Board of Arbitration was canvassed to some extent, and a resolution adopted declaring in favor of such amendments to the laws governing the board as would in the future make its decisions compulsory. The Cigar Makers International Union had for a number of years maintained a blue label to enable consumers to distinguish the product of its members. A yellow label had been placed upon cigar boxes filled with cigars made by the Knights of Labor. Heretofore the union cigar makers had met with little opposition in New England States through the yellow label. The Knights of Labor, before adjourning, endorsed the cigar makers' yellow label, issued by authority of its general executive board.

20th. — At a meeting of the board of shop delegates of the United Garment Workers, representing every union in the city, a union working card, similar to the one in use by the Building Trades Council, was adopted. Every union man and woman in the clothing trade were supplied with a card, and unless it was presented employment would be refused in all union shops.

21st. — At a meeting of Journeymen Tailors Union 12, the sum of \$20 was raised by a voluntary subscription to assist the striking tailors of Denver, Col.

22nd. — At the regular monthly meeting of the Building Trades Council new delegates were admitted from 12 different unions in the building industry. A special legislative committee was appointed to agitate in favor of employing citizens only on public works. The services of the late Gen. B. F. Butler to the labor cause were recognized by the appointment of a committee to draw up resolutions expressive of the gratitude of the council for his work in behalf of the movement for less hours of labor for the working class. The union label of the Furniture Workers Union was endorsed, after which the council went into a consideration of the trouble between the two unions of paper hangers. — At a meeting of O'Connell Assembly 7174, K. of L., the action of the State Assembly in withdrawing the delegates of all K. of L. assemblies from the Boston Central Labor Union was endorsed, the newly elected officers installed, and the sum of \$50 donated to the idle men at Homestead. — At a meeting of Stablemen's Assembly 6027, K. of L., it was voted to withdraw its delegates from the Central Labor Union.

24th. — At a meeting of the Fishermen's Protective Union a discussion was held over an alleged violation of the contract labor laws, which, it was claimed, took place at the beginning of the fishing season every year. It was claimed that men were engaged for American fishing vessels who resided in the British Provinces where the contract was made. Claim was also made that the law which provided "that officers of American vessels shall be American citizens," was evaded by these officers taking out naturalization papers in the ports of the United States, while still retaining their allegiance to Great Britain, where in Nova Scotia and other of the provinces, they supported their families, owned or rented homes, and voted. It was claimed that they made their engagements in the winter time, and that they worked for wages which the fishermen of this country found it impossible to live upon. One of the members at the meeting stated that "men illegally engaged arrive in this city from the Provinces just before the opening of the season; they are then sent on board of fishing vessels from Gloucester, Provincetown, and Boston, and the residents are left standing on the dock waiting until the supply of men thus engaged is exhausted before they are given a chance to get work." Another complaint was that vessels left American ports short-handed and put into the Provinces where the remainder of the crew was engaged. On the return the men were landed at the same ports and the vessel was taken to American ports, where the product of this foreign contract labor was sold in competition with that of American citizens. As this was not recognized as a violation of the alien contract laws of this country the union proposed to make an effort, through the American Federation of Labor, to have a law passed covering this point.

25th. — At a meeting of the United Label League of Boston and vicinity, it was decided to issue circulars to all the large cities in the Union, requesting all labor organizations having trade labels to form label leagues, and co-operate with the Boston organization in forwarding the sale of union made goods.

26th. — At a meeting of the executive board of the five unions of the garment workers in Boston, attention was called to the published charges of the contractors that members of the



union had burned clothing through spite while working on it. This the members of the board denied, and said that as much clothing was burned in non-union shops as in any other. A legislative committee was appointed to secure legislation to prevent dishonorable contractors from defrauding employes of their wages.

29th. — At a meeting of Machinists Union 264 and Carpenters Union 83 the blue label of the Cigar Makers International Union was endorsed.

## FEBRUARY.

1st. — At a meeting of the Boston Steam Fitters Union five new members were admitted. — The Painters and Decorators Union of South Boston admitted fourteen new members. — The Fishermen's Protective Union endorsed the label of the United Garment Workers. — The act of the Mayor of Boston in petitioning the legislature for municipal ownership and control of gas and electric light plants was unanimously endorsed by the executive board of the State Assembly, K. of L. The recommendation of General Master Workman Powderly, giving every local assembly the power to appoint a special organizer, was adopted and arrangements were made for holding a monthly conference of special organizers. It was decided to hold the regular meetings of the board on the first and third Tuesdays of the month.

2nd. — Members of the Core Makers Union voted to hold their regular meetings on the first and third Thursdays of the month; four new members were admitted. — At a meeting of Boiler Makers Union 10, it was voted to donate \$400 to the locked-out members of the craft in Peoria, Ill. Delegates to the Boston Central Labor Union were elected and eight new members admitted. The ball committee reported having cleared \$150. — According to reports submitted at a meeting of Machinists Lodge 264, new lodges had been organized in Hyde Park, Cambridge, East Boston, South Boston, Lynn, Nashua, Brockton, and other places during the past few weeks. A committee was appointed to co-operate with the lodges in Boston and vicinity, in forming a machinists' trades council. A new code of by-laws was adopted, and the blue label of the Cigar Makers International Union endorsed. — The executive boards of United Garment Workers Unions 1 and 25 voted to admit representatives from Union 41 into their councils. — According to the annual report of the treasurer, submitted to the members of the Longshoremen's Provident Union, that organization had paid out in sick benefits during the past year \$1,800 and in the same time collected \$2,200. A number of new members were initiated. — Ericsson Lodge of Machinists voted to hold its regular meetings on the second and fourth Thursdays of each month, and a resolution favoring the adoption of a machinists' trades council was adopted. Fifteen new members were admitted.

5th. — Representatives from 33 local assemblies in Suffolk County attended a special meeting of District Assembly 30, K. of L. Resolutions were adopted condemning the use of the Common to facilitate rapid transit. The yellow label of the order was endorsed, and the delegates instructed to request their assemblies to purchase goods bearing the yellow label whenever possible. A new delegation from Local Assembly 595 was admitted. — At a meeting of Noddle Island Assembly 5789, K. of L., resolutions were adopted condemning the contemplated use of the Common for purposes of rapid transit.

7th. — At a meeting of the Boston Cooks Alliance it was voted to join the National Waiters and Cooks Alliance and eight new members were received. — Eureka Assembly 9623, K. of L., passed resolutions against cutting up any portion of the Common; resolutions were also passed censuring the Central Labor Union for its denunciation of District Assembly 30. The K. of L. yellow label was endorsed and 13 new members were received. — Pianoforte Workers Union indorsed the blue label of the cigar makers.

8th. — Delegates from Painters Unions 11 and 236 of the city proper, 86 of East Boston, 57 of South Boston, 145 of Roxbury, and Paper Hangers Union 258, all belonging to the Brotherhood of Painters, Decorators, and Paper Hangers of America, met and organized a city council to handle all trade matters which affected the interests of the members of the different local unions. It was proposed to open a union headquarters and to put in the field a walking delegate, or business agent, to look after the business of the unions. — At a meeting of the United Label League of Boston and vicinity it was voted to endorse the union label of the Furniture Workers Union and delegates from that body were admitted to permanent membership in the organization. A committee was appointed to appear at a public hearing before the judiciary committee at the State House on a new draft of a bill protecting trade labels.

10th. — At a meeting of William Lloyd Garrison Assembly 3123, K. of L., it was voted to withdraw its delegates from the Central Labor Union. Resolutions were adopted protesting against the proposed encroachment on the Common, and a committee was appointed to raise funds for the unemployed at Homestead.

12th. — Ben Franklin Assembly 5463, K. of L., composed of men working in the Health Department of the city, held a meeting and voted the sum of \$50 to the idle men at Homestead; it

was also voted to appoint a special organizer. — The State Alliance of K. of L. held a meeting and endorsed the petition of the marble workers asking for an increase in the duty on marble which was being imported, as the present situation was having an injurious effect on the marble workers of Boston. Reports were received from the Southern and Western parts of the country showing that an active demand for yellow-label shoes was being created by the Farmers Alliance. — At a meeting of the Building Trades Council the principal topic of discussion was the proposition of the carpenters that, instead of the local unions being represented direct, the representation should be from and through the Carpenters City Council. New delegates were admitted from Building Laborers Union 15, Marble Cutters Union, Slate and Metal Roofers Union, and the Amalgamated Society of Carpenters. Resolutions on the death of General Butler were adopted. — At a meeting of O'Connell Assembly No. 7174, K. of L. of Charlestown, resolutions were unanimously adopted protesting against the use of the Common for street railway purposes. — The blue labels of the furniture workers, shoemakers, and cigar makers, and the white label of the garment workers were endorsed by the members of Pilgrim Lodge of the Machinists Association. It was decided to take steps to organize a machinists district council for Boston and vicinity. Fourteen new members were admitted.

14th. — The blue label of the Cigar Makers International Union was endorsed at a meeting of the Cabinet Makers Union.

15th. — At a regular meeting of Machinists Union 28 a discussion took place on the employment of engineers who were not machinists by the Boston Fire Department. It was stated that carpenters and men from nearly every other trade were engaged by the fire commissioners, whereas a knowledge of the machinists' trade was necessary to all those who handled a steamer. It was voted to bring the matter to the attention of the commissioners and to request them to employ machinists. The committee in charge of the establishment of a bureau for unemployed members reported that an office had been opened on D street, South Boston. Several new members were received. — At a meeting of Plumbers Union the cigar makers label was endorsed and several new members received.

16th. — The Garment Workers decided to put a man on the road permanently to introduce its union label. Forty new members were admitted.

17th. — At a meeting of the Boston Wood Carvers Union the blue label of the Cigar Makers International Union was endorsed.

19th. — At a meeting of the Boiler Makers Union resolutions were passed refusing to do any of the work which properly belonged to the steam fitters.

26th. — The proposition to take a strip from Boston Common for the purposes of traffic was considered at a meeting of Freight Handlers Assembly 5572, K. of L.; resolutions were adopted that called for the preservation of the Common in its present form, requesting all public spirited men and women to resist the attempt to cut the historic grounds up, and to take such action as would tend to settle the question for all time.

### MARCH.

1st. — At a meeting of Machinists Lodge 264 the death of Wm. Taylor, founder of the International Machinists Association, was discussed and a sum of money contributed to the fund being raised by the association machinists for his widow. Sixteen new members were admitted. — At a meeting of the Boiler Makers and Iron Shipbuilders Union the blue label of the Cigar Makers International Union was endorsed and 10 new members admitted. — Hat Finishers Union elected delegates to the Central Labor Union and initiated four candidates.

2nd. — At a meeting of Boston Journeymen Plumbers Union the bill before the Legislature providing for the examination of employing plumbers was discussed. The union was opposed to the provisions that required the employer to put up \$1,000 bonds as it would tend to keep the number of employers limited while giving them the power to hire cheap and incompetent men and boys, and was in favor of specifying in what manner the employers should be examined. A committee was appointed to represent the union before the Legislature.

4th. — Preparations for establishing a shorter working day throughout the various sections of this State were perfected at a meeting of the State Council of Carpenters. Reports from the general organizer were to the effect that many new unions had been formed, and that the gain to the organization amounted to over 200 members. It was voted to direct the organizer to visit Salem, West Newton, and Brookline, and also to arrange to speak at a mass meeting of carpenters at Bar Harbor, Me.

5th. — At a meeting of the Boston Central Labor Union a delegation from the striking rubber workers of the Columbia Rubber Co., East Braintree, gave a detailed account of the strike, and their course was endorsed. Employment bureaus were condemned by the union and the advisability of petitioning the Legislature to establish a State bureau was discussed.



**6th.** — Reports of an encouraging nature from the various ports along the Atlantic coast were received at a meeting of Seamen's Union. The secretary reported having enrolled 70 members during the past week, and that a branch headquarters had been opened in New York City.

**7th.** — Twenty-two members were admitted at a meeting of Furniture Workers Union.

**9th.** — Ericsson Lodge, International Association of Machinists, voted to be represented at the international convention. The New England organizer reported that a lodge had been established in Newton with 44 charter members.

**12th.** — At a public meeting of the marble workers and polishers of Boston between 50 and 60 new members joined the assembly. — At a meeting of the Building Trades Council new delegates were admitted from Carpenters Union 545, Steam Fitters Union, Electrical Workers Union, Furniture Workers Union, Steam Fitters' Helpers Union, and Building Laborers Union 6. A delegation from the striking mackintosh workers at East Braintree was present, and at their request the council voted to assist them financially. A request for a higher duty on marble from the Marble Workers Union was endorsed by a unanimous vote. It was proposed to form a National Association of Building Trades Councils and the ways and means committee were instructed to correspond with councils throughout the country with that idea in view. The Knights of Labor painters belonging to Assembly 4495 were denied admission. — At a meeting of the delegates of the trades unions comprising the Boston Central Labor Union, the proposed changes in the constitution of that body were discussed and the union adopted a new declaration of principles and preamble which read as follows:

"We affirm it to be the chief duty of this union to encourage thorough organization of all classes of workers, as the first step toward greater industrial freedom.

"We therefore pledge ourselves to extend all reasonable aid in organizing the unorganized trades, and assisting to build up those already in existence.

"We believe in the interdependence of craftsmen of all callings, and while conceding the right of each affiliated society to manage its own affairs we declare it the duty of this central body to assist all local organizations in defending their rights, and in endeavoring to secure better conditions of labor for their members.

"We affirm one of the main objects of this union to be educational; to provide a local congress of labor, where questions of general interest may be discussed.

"We shall aim to form a society where representative men of the labor movement may become acquainted for mutual instruction and improvement, where ideas may be freely exchanged and where the grave problems of social reform may be debated and analyzed.

"It shall be the duty of this organization to assist in the public agitation of labor reform principles, and especially those of the short-hour movement as formulated by the American Federation of Labor.

"We assert that the economic integrity of organized labor can best be maintained by a strict policy of absolute political non-partisanship, and declare it inadvisable that this union shall ever pledge its support to any political organization — national, State, or municipal.

"We recommend, however, that every wage earner shall exercise an independent use of the ballot, and, as a citizen, vote for those men and measures, irrespective of party, which he deems for the best interests of labor.

"The Central Labor Union shall claim no jurisdiction over the political acts of any individual delegate unless such action be taken in his capacity as a delegate. In such case the delegate shall be subject to the penalty of revocation of all rights and privileges in this body.

"We declare ourselves in favor of national, State, or municipal legislation to secure the following measures, and that it is the duty of the organization to use all honorable influence with legislators to accomplish its enactment:

"1. The furtherance of the shorter-hour work day for public employes and for women and children.

"2. The abolition of child labor under 15 in manufacturing and mercantile establishments, and the raising of the school age to 16.

"3. The abolition of contract labor on public works.

"4. The attaining of direct legislation.

"5. The regulation of prison labor so as to reduce to a minimum its competition with free industry.

"6. An employers' liability act that shall not interfere with the common law right of recovery.

"7. The abolition of the system of obtaining blood-money from seamen, now practised in this State.

"8. The introduction of the Australian ballot system in caucuses.

"9. The securing of equal pay for equal work, irrespective of sex."

The following, also, was adopted :

"The Central Labor Union shall consist of delegates from any regularly constituted trades union in Boston and vicinity which does not draw the color line, but no delegates from any organization of a political nature shall be admitted."

Other parts of the constitution were changed to provide for the admittance of visitors on a two-thirds vote of the meeting and changing the basis of representation to nine delegates from each union.

17th. — At a meeting of the Building Trades Council, a decided increase in the membership of the Steam Fitters' Helpers Union was shown and in the various painters' organizations through the working card system introduced by the council.

18th. — The members of the Brewers Protective Union voted to affiliate with the State branch of the American Federation of Labor.

19th. — A mass meeting of Hebrew carpenters was held and at the conclusion of the meeting a union was organized with 75 charter members. — Twenty-one delegates representing Freight Handlers Assemblies 5572, 3702, and 688 held a meeting and formed the Boston Freight Handlers Trade Council, under the auspices of the Knights of Labor. Officers were elected and a committee appointed to draft a constitution and by-laws. — It was reported at a meeting of Water Works Assembly 479, K. of L., that nearly all the men employed in this department of the municipal service had been put to work. Four new members were admitted. — Under the auspices of the Boston branch of the Journeymen Tailors Union, the men employed by the piece masters in the custom tailoring business were organized; 60 names were placed upon the charter list and permanent officers were elected. — At a meeting of Boiler Makers Union it was voted to raise the initiation fee to \$5, and seven new members were admitted. — According to reports made at a meeting of the Carpenters District Council, 500 members had been gained in the past four weeks. New delegates were received from No. 216 of Waltham. — Park Department Assembly 7576, K. of L., admitted several new members. — Freight Handlers Assembly 688, K. of L., admitted new members and elected delegates to the newly formed trade council of freight handlers.

21st. — At a meeting of the executive board of the State Assembly, Knights of Labor, it was voted to hold the next state convention at Worcester, April 18. The convention will be followed by a conference of the State, national trades, and district assemblies of the six New England States. — At a meeting of the Mule Spinners Association of New Bedford, it was voted that in case of the discharge of a spinner on account of trouble with a back boy, the union should demand the discharge of the back boy, and in case its demand was refused would strike. — A union of street railway employes was founded at Worcester with 225 charter members. Other unions were in process of formation at Portland, Auburn, Manchester, Dover, Haverhill, Brockton, Providence, Fall River, Springfield, Lawrence, Hartford, New Haven, New Bedford, and elsewhere. The consolidation of the various street railway lines was given as the cause of this movement.

23rd. — The *Boston Post* published a history of the United Brotherhood of Carpenters and Joiners of America. This brotherhood was formed at a convention of carpenters at Chicago, Aug. 12, 1881, with 12 local unions and 2,042 members; at the present time there were 802 locals and 84,376 enrolled members, with 51,313 members in good standing and benefits. Where wages 12 years ago were \$1.50 to \$2.50 per day they had been advanced to \$2.25 to \$3.50 per day. In 531 cities this organization had forced wages up, and close to five and a half million dollars more wages had been annually distributed in the past five years. In the past four years the Brotherhood had spent nearly \$146,000 from the general fund in strikes and lockouts. The United Brotherhood extended to every State and territory of the United States and into Mexico, and in the leading Provinces of Canada. It had unions in 724 cities; 46 of them were composed of Germans; 7 French, 4 Scandinavian, 4 Bohemian, 1 Polish, 1 Jewish, and 2 Holland. Of these 802 unions, one was located in Mexico, 16 in Canada, 34 on the Pacific coast, 127 in the Southern States (10 of these being composed entirely of colored men), 68 in New England, 263 in the Middle States, and 293 in the Western States. New York headed the list with 93 unions, Pennsylvania came next with 80, and Ohio third with 74. The carpenters had maintained the most intimate and friendly relations with all national and international unions, and through central labor unions or local delegate bodies their local unions had shown a practical interest in the welfare of all branches of united labor. — The delegates of Freight Handlers Assemblies 688, 3702, and 5572, K. of L., met and perfected the organization of a trade district council. A constitution and by-laws were adopted, and several questions pertaining to railroad service were discussed. — Members of the John Ericsson Lodge of Machinists decided to request the South Boston and other suburban lodges to join with it in sending a delegate to the Indianapolis convention of machinists. — The female cooks employed in the principal hotels and restaurants of Boston organized a Female Cooks Alliance with 50 charter members.

27th. — Haverhill Lasters Protective Union passed resolutions against the formation of a sole leather trust.

## APRIL.

**2nd.**—At a meeting of Old Colony Assembly 3,702, K. of L., 25 new members were admitted.

**5th.**—At a meeting of Stablemen's Assembly 6627, K. of L., the report of the auditors showed a large increase in membership and a bank account of over \$1,000.

**6th.**—At a meeting of the Boiler Makers Union, 25 new members were admitted.—The Pavers Union elected and installed officers, and it voted to adopt a working card.

**7th.**—Conductors, drivers, and motormen affiliated with Union 3873, A. F. of L., held a meeting and unanimously adopted resolutions favoring the passage of a bill in the State Legislature providing for 10 hours for all street railway men throughout the State.

**8th.**—A Steam Fitters Union was formed at Holyoke with 24 members.—At a meeting of Pant Makers Union the organizing committee reported having formed the knee-pant makers into a new union of garment workers, and five new members were admitted.—Bakers Union 4 admitted 15 new members.

**12th.**—At a meeting of Ironworkers Union 1, recently organized, it was decided to affiliate with the Building Trades Council and delegates were elected.—The Spinners Association of Fall River voted to invest the funds of the association, which amount to \$10,000, in places other than national banks.

**13th.**—At a meeting of Marble Polishers Assembly 6849, K. of L., 26 new members were admitted.—At a meeting of the Wells Memorial Benefit Association the treasurer's report stated that 35 new members had been admitted during the year, that \$2,200 had been paid out in sick benefits, and that a dividend of \$2.75 was due each member.

**14th.**—At a meeting of the Tin Plate, Sheet Iron, and Cornice Workers Union the constitution was amended and 10 new members received.—A delegate to the Chicago convention was chosen at a meeting of the Boston Waiters Alliance and 15 new members admitted.

**16th.**—At a meeting of Building Laborers Union 6 the petition of the Marble Workers Assembly for an increase of duty on foreign finished marble was endorsed, as was also the strike of the boiler makers. Eighteen new members were admitted.

**18th.**—At a meeting of Furniture Workers Union 24, it was reported that four cabinet shops had been organized during the past week; 14 new members were admitted.

**19th.**—It was reported at a meeting of the Electrical Workers Union that the eight linemen in the employ of the American Automatic Fire Alarm Co., who recently struck, had gained their demands and returned to work.—Nineteen new members were admitted at a meeting of Painters Union 11.—The Cooks Alliance admitted eight new members.—Painters and Decorators Assembly 264, K. of L., admitted 19 new members.

**21st.**—The blue label of the cigar makers was endorsed by the Coremakers Union, and it was voted to censure any member of the union reported for smoking a non-union cigar; 4 new members were admitted.—At a meeting of Carriage Makers Union reports from the various shops throughout Boston and vicinity showed that the nine-hour day was giving excellent satisfaction to employers and employes alike. It was decided to take steps to organize Amesbury, Merrimac, Lawrence, and New Haven. Forty-five new members were admitted.—The grievances of the Lathers Protective Union were placed in the hands of the Building Trades Council at a meeting of the grievance committee of the latter body. In two weeks the organizations attached to the B. T. C. enrolled 1,500 new members as a result of the introduction of the working card; the card was issued to the lathers.

**22nd.**—The Bricklayers Union, Holyoke, voted that no member might work on a building on which any work had been done by non-union men. The laborers who prepared the stone foundations must be members of a union or no more work would be done.

**23rd.**—The Building Trades Council, at its regular monthly meeting, admitted new delegates from Hebrew Carpenters Union 56, Painters and Decorators Union 236, and the newly organized Housesmiths Union. Resolutions on the death of Weston Lewis, formerly chairman of the State Board of Arbitration, were adopted.—Eighty-two carriage workers were admitted into the Carriage Workers Union, New Bedford.

**24th.**—It was decided at a meeting of the Cooks Alliance to publish a monthly journal and an editor was elected.—Members of Cabinet Makers Union 24 voted to raise their monthly dues and admitted 25 new members.—A union of floor layers was founded with 50 charter members.—At a meeting of the Painters and Decorators Union a committee was appointed to arrange for a mass meeting of the craft at an early date; 25 new members were admitted.

**25th.**—The Boston Pedlars Protective Association admitted 25 new members.

**28th.**—Marble Polishers Assembly 6849, K. of L., met and admitted 15 new members.—At a meeting of Paving Department Assembly 9816, K. of L., the 54-hour bill for women and children was endorsed.—At a meeting of the Boston Waiters Alliance a telegram from New York was read stating that the attempt of the waiters to secure an advance in wages was meeting with success. Thirty-one new members were admitted, 13 being hotel porters.

## MAY.

1st. — A State association of master plumbers was formed at Worcester and officers elected; the new organization to be affiliated with the National Association of Master Plumbers.

3rd. — At a meeting of Iron Moulders Union 108, the secretary reported that 80 new members had joined since March 15. It was voted to organize several new unions outside of Boston. — Nine new members joined the Boston union of the National Brotherhood of Electrical Workers and 15 names were proposed. — At a meeting of the Operative Plasterers International Union, the reports from the various shops in Boston and vicinity showed that the eight-hour day was giving good results to both employer and employé. — Painters and Decorators Union 236 admitted 20 new members.

5th. — At a mass meeting of the housesmiths of Boston 18 new members were admitted.

9th. — Ninety-eight charter members were present at a meeting of the newly formed union of floor layers and a constitution and by-laws were adopted; officers and delegates to the Carpenters Council were also elected.

14th. — At a meeting of Bakers Union 4 the strike of the union bakers was considered and the meeting voted to levy an assessment of one day's pay on every member of the union for the purpose of carrying on the fight. Nine new members were admitted.

17th. — Endorsement was given the garment workers label at a meeting of Painters and Decorators Union 236. Reports from various shops showed that 80 cents per hour was being paid by every employer in Boston. The union admitted 25 new members and received 20 applications for membership. — At a meeting of Iron Moulders Union 106, it was voted to endorse the label of the United Garment Workers of America, and to purchase only such garments as bore the said label; ten new members were admitted.

21st. — At a meeting of L. A. 479, K. of L., composed of the employés of the Boston water works, the names of all shoe firms using the yellow label were announced and the members pledged themselves to patronize only such firms. — At a meeting of Building Laborers Union 6, 15 new members were admitted and 25 propositions received. — At a meeting of the Central Labor Union the grievances of the New York cigar makers were explained; the position taken by the New York unions was endorsed and a boycott placed on all but blue label cigars.

24th. — The paper hangers of Springfield met and perfected an organization; a constitution and by-laws were adopted and officers elected. — At a meeting of the United Label League the Cigar Makers Union, Furniture Workers Union, Typographical Union, Boot and Shoe Workers Union, Lasters Union, Bakers Union 4, Brewers Union 15, Journeymen Tailors Union, Garment Workers Union, Iron Moulders Union, Hat Finishers Association, and Hat Makers Association were represented. In answer to questions by several delegates, the reasons for the boycott issued by Brewers Union 15 were explained by the delegates from that body to the league, which endorsed the boycott.

25th. — At a meeting of the Clothing Trades Council the executive board reported that goods from five tenement houses were being received in Boston, and the board was instructed to see the Chief of the District Police regarding this violation of the law.

28th. — At the regular convention of D. A. 30, K. of L., delegates were present representing 25 local organizations. Resolutions were presented and adopted, denouncing the boycott issued by Brewers Union 15. Local Assembly 595 presented the following: "Whereas, the Legislature has made provision for the appropriation of lands by the park commission within the limits of wards 6 and 7, of an assessed value not exceeding \$3,000,000, for a park for the use of children in the congested North End district; Resolved, That District Assembly 30 endorse this act of the Legislature and urge its immediate acceptance by the city government, in order that the provisions of the said act may be carried out at an early date."

The following resolution, after discussion by the D. A., was unanimously adopted: "Resolved, That the charters of all gas trusts should be revoked, and that cities and towns in this Commonwealth should be granted full power to build, purchase, or establish gas and electric works for the manufacture and sale of gas and electricity in their respective communities, and that the earning capacity of plants at present established shall not be taken into consideration in the purchase of said plants."

Resolutions were also adopted "that the time had come when the city of Boston should assert its capability, manufacture its own gas and electricity for the lighting of its streets, its public buildings, and for sale to its citizens." — A meeting of the clothing contractors was held for the purpose of organizing to offset the work of the garment workers unions of Boston. It was claimed that the labor unions of the clothing trade were demoralizing the profits of the manufacturers and were gradually driving the smaller contractors out of the business. Complaints were made of the alleged arbitrary action of the union men, who, it was said, were advocating a further reduction of the length of the working day to the detriment of the trade.

**30th.** — The organizing committee of the pant makers branch of the United Garment Workers held a meeting to consider the best means of bringing together the non-union members of the craft for the purpose of fighting the tenement house sweat-shop evils. The committee decided to again call the attention of the delegates of the Central Labor Union to the need of a vigorous agitation against the sweating system, and urge them to push the work of creating a demand for union label clothing, as a means of assisting in abolishing the "sweater."

**31st.** — According to the annual financial report of the Cigar Makers International Union, which was submitted to the executive board of Cigar Makers Union 97, it was stated that "notwithstanding the many trade disputes and the enormous amount expended in benefits, the funds of the organization have increased during the past fiscal year over \$81,000, and that the per capita tax is \$18.88. The total membership of the international union is over 27,000, and the sum of \$237,279.09 was paid out in benefits during the year, and \$1,769,866.91 in the past 14 years." Several new members were admitted.

## JUNE.

**2nd.** — A meeting of conductors, drivers, and motormen was held under the auspices of Union 3873, A. F. of L. Complaints were received from several divisions that men were being suspended for periods of three to seven days for violations of the rules; it was voted to refer these complaints to the executive committee. — Resolutions were adopted by the Coremakers Union calling upon the city government to devote a portion of the Franklin fund to the establishment of free public baths all the year round. — The Wood Carvers Union admitted eight new members and paid several sick benefits. — International Furniture Workers Union admitted 20 new members. — The executive board of Carriage and Wagon Workers Union 9 admitted 10 new members. It was reported that new unions had been established in Lowell, Lawrence, Lynn, and New Bedford. — The housesmiths of Boston held a meeting at which 23 new members were admitted. They discussed the advisability of joining the national organization.

**4th.** — Coremakers Union 5576 endorsed the Central Labor Union's action in regard to the coal handlers' strike. It also voted to buy no goods of any shoe dealer or clothing store unless they bore the union label, and voted to buy coal only of those coal dealers who acceded to the men's demands. Three candidates were admitted to membership.

**5th.** — At a meeting of Coopers Assembly 4956, K. of L., the brewery boycott was denounced and 25 new members admitted. — Resolutions regretting the Central Labor Union's position on the brewery boycott were adopted by Carpenters Union 83 and referred to the Carpenters City Council for action. Thirty-six new members were enrolled. — Stairbuilders Union 545 endorsed the working card issued by the Building Trades Council and added five members to the roll. — The Hoisting and Portable Engineers Union endorsed the Building Trades Council working card and admitted 12 new members. — Bricklayers Union 8 admitted five new members. — It was reported at a meeting of Boot and Shoe Workers Union 79 that the demand for the blue label of the craft was increasing, and that many retail firms had agreed to keep blue labelled goods in stock. Six new names were added to the roll. — Coopers Assembly 4956, K. of L., initiated 14 candidates. — The Boston Steam Fitters Union admitted two new members and received eight applications. It was voted to organize the steam fitters of Brockton. — The Hebrew Carpenters Union voted to endorse the label of the United Garment Workers of America. — At a meeting of the Boston Central Labor Union, delegates from Typographical Union 13 complained that a local paper did not pay the union scale, and that organized workmen could not consistently read the proceedings of the city government in a non-union paper.

**7th.** — The hotel porters met and organized a union and elected officers. It was resolved to apply to the Hotel and Restaurant Employés National Alliance for a charter.

**8th.** — Stonemasons Union 1 admitted five new members.

**16th.** — A mass meeting of the gravel roofers of Boston and vicinity was held, a union formed and officers elected. — Harmony Lodge 392, International Machinists admitted 23 new members.

**18th.** — At a meeting of the Central Labor Union the following resolutions were offered by a delegate from Cigar Makers Union 97 as expressive of the feeling of that body on the alleged attacks of officials of the Knights of Labor against the work being performed by union cigar makers:

"Whereas, certain organizations of the K. of L. have shown their utter disregard of the welfare of organized labor by continued virulent attacks upon various bona-fide labor bodies connected with the Central Labor Union; and

"Whereas, while acknowledging that their attitude at present is only in the strictest accord with their previous policy, and would not be recognized by this union if the product of scabs were not being recommended by them to the patronage of members and friends of organized labor, and



**"Whereas, while lamenting the fact that organized labor must turn aside from its legitimate purpose of improving conditions of its members to protect itself against the machinations and slanderous insinuations of traitors in its ranks, be it**

**"Resolved, That we denounce the actions of the Knights of Labor as detrimental to the best interests of the workers and demand that their hands be kept off those organizations that are the result of years of struggles and sacrifices on the part of their members and friends; and be it further**

**"Resolved, That unless our unions are freed from the retarding interference of their enemies that such action be taken as shall forever prevent a repetition of it."**

A delegate from the Women's Rescue League explained that a bill was to be introduced in the Legislature for the purpose of having persons afflicted with infectious and contagious disease admitted to hospitals free of expense. The meeting endorsed the plan.

On motion of a delegate from Typographical Union 13, the following was endorsed:

**"Whereas, it is reported that some of the large retail stores in this city require their salesgirls to work unnecessarily long hours for small wages and under rules injurious to health, as, for instance, forbidding sitting during hours of labor;**

**"Resolved, That the grievance committee of this body be requested to investigate the conditions of employment of salesgirls in these establishments and to report to the next meeting of this organization." — At a meeting of the Boiler Makers Union five new members were admitted and 10 applications referred.**

**20th. — About 100 men engaged in machine woodwork met and organized a trade union to be known as the Independent Machine Woodworkers Union. The union to be independent of any central labor organization. — Painters and Decorators Union 11 admitted four candidates. — At a meeting of the International Furniture Workers Union it was reported that the work of organizing the men in the piano and organ shops had been commenced and was progressing rapidly. The union admitted 12 candidates and received eight propositions for membership.**

**22nd. — John Ericsson Lodge of Machinists admitted five new members and elected officers. — At a meeting of Garment Workers Council 2, it was reported that the rubber workers of Stoughton and Reading had received their charters from this order as locals 58 and 59. — At the monthly meeting of the Building Trades Council the following new unions were admitted: Building Laborers Union 17 of Brookline, Fresco Painters Union 204, and Tar and Gravel Roofers Union.**

**26th. — The local union of Boot and Shoe Workers of Natick, which had been maintained since 1887, decided to affiliate with the Boot and Shoe Workers International Union, and in accordance with this decision a charter was granted them. This placed every branch of the boot and shoe trade in Natick under the jurisdiction of national organizations using the blue label.**

## **JULY.**

**2nd. — At a meeting of coal handlers and teamsters, the organization of a union was effected with 165 names on the roll, and affiliation made with the American Federation of Labor. — Gas House Employés Assembly 7597, K. of L., endorsed the brewery strike. — Water Works Assembly 479, K. of L., voted to assist the brewery strikers, and the boycott placed by D. A. 80 on brewery products was endorsed. Four new members were admitted. — At a meeting of the Central Labor Union new delegates were admitted from the Custom Tailors Union, Journeymen Tailors Union, Typographical Union 13, and Journeymen Horseshoers Union. Resolutions were adopted protesting against alleged discrimination against women compositors and commending the action of the compositors who struck against such discrimination and in favor of equal pay for equal work. A new union of upholsterers with 150 charter members was reported; also a new union of shirt makers with 45 charter members.**

**3rd. — Hoisting and Portable Engineers Union initiated 15 candidates. — The Hebrew Carpenters Union admitted several new members.**

**6th. — The journeymen stairbuilders met and installed new board of officers; eight members were admitted and five applications received. — The International Association of Machinists 264, by a formal resolution, voted a sum of money in aid of the non-union men now engaged in a strike. It was resolved that the present status of the controversy demanded the co-operation of all organized labor, and that the machinists proposed to aid the strikers until victory or defeat resulted. Ten members were admitted and officers installed.**

**9th. — The New England Knights of Labor Alliance was founded in Boston to-day. It was believed by the promoters of this movement to be the most important and aggressive step ever taken by members of the order in this section of the country. There were in attendance representatives from Rhode Island, Connecticut, Maine, Vermont, and Massachusetts. Among the principal trades represented were shoemakers, clothing cutters, brass workers, painters and**

decorators, and textile workers. The principal objects of the alliance were to secure uniform labor legislation in the several New England States, to push the sale of yellow-label goods, and the organization of new local assemblies. Committees of five from every state were appointed on legislation, labels, boycotts, and organization. — At a meeting of Building Laborers Union 6, the treasurer reported having \$1,355.50 in the treasury, with 1,343 members in good standing. A committee was appointed to revise the by-laws and 15 new members were admitted.

10th. — The bargemen of Lynn held a meeting and formed the Lynn Bargemen's Association.

14th. — At a meeting of the Lasters Protective Union the secretary reported that the union was growing rapidly and that it was a great deal stronger than at any time since the organization was started. Eight candidates were initiated. — A new labor union was organized under the name of the Glassworkers and Mirror Makers Protective Union; officers were elected and it was voted to hold meetings the second and fourth Sundays.

17th. — At a meeting of the Practical Stonemasons Union a delegation from the Hoisting and Portable Engineers Union requested that the men lay no stone which was hoisted by non-union men, which request was granted.

18th. — Sixty-seven working girls employed in the clothing industry held a meeting and reorganized Union 37, United Garment Workers of America. — Routine business was transacted and three new members admitted at a meeting of Slate and Metal Workers Union. — At a meeting of Painters Union 11 five candidates were initiated. — At a meeting of Furniture Workers Union 24 it was reported that a large Boston furniture shop had been thoroughly organized recently, and that every upholsterer, cabinet maker, and varnisher in the employ of the concern were members of their respective unions. Nineteen new members were admitted.

20th. — To prevent incompetent men engaging as experienced inside wiremen the Electrical Workers Union decided to examine into the competency of all applicants for admission to Electrical Workers Union 35; a committee was chosen composed of practical electricians, whose duty it will be to examine all candidates for membership in the union.

23rd. — Ten new members were admitted and 14 proposed at a meeting of Building Laborers Union. — A new union of teamsters and coal handlers was organized under the official title of Local Union 6128, A. F. of L. A new constitution and by-laws were adopted and 50 new members admitted.

24th. — A new union, composed exclusively of the men who do the "firing up" on steam boilers, was organized under the name of the Firemen's Protective Union of Boston. It was unanimously voted to affiliate with the American Federation of Labor, and to join the State organization as well as the Central Labor Union. The union started with 470 charter members.

25th. — At a meeting of the Coast Seamen's Union, it was reported that 831 new members had joined the union during the last three months, and a communication from the national secretary told of equally large accessions to the other unions throughout the country. — Union 15, International Building Laborers, initiated 12 candidates and the committee appointed to urge the organization of Italian hod carriers reported progress.

## AUGUST.

1st. — It was reported at a meeting of Cabinet Makers Union 24 that two more furniture manufacturers had complied with the rules governing the use of the label, and that thereafter the furniture workers' blue label would be placed on the products of these firms. Ten new members were admitted and 11 applications for membership acted upon. — At a meeting of Eureka Assembly 9623, K. of L., the newly elected officers were installed, ten new members admitted, and seven applications for membership acted upon. — At a meeting of Slate and Metal Roofers Union a protest was made against the members of this craft obtaining admission into the Gravel Roofers Union. It was charged that a number of the slate and metal roofers had applied to the latter organization because of its lower initiation fee. A committee was appointed to confer with the Gravel Roofers Union in relation to the question.

4th. — At a meeting of Horseshoers Union 5, 62 new members were admitted, and a committee from a meeting of the bosses conferred with the union in reference to the scale of prices for horseshoeing. An advance in the charges was made and it was agreed that no contract work should be done.

6th. — Harmony with the Knights of Labor was the subject of discussion at a meeting of the Boston Central Labor Union. The proposition from the Knights of Labor was in effect that the Central Labor Union, the Knights of Labor, and the Building Trades Council should each appoint a committee of two, and the six thus appointed should select a seventh man to constitute a permanent board of arbitration for the settlement of all disputes between the bodies, and that its decision should be final.

7th. — At the eighth annual convention of the State branch of the American Federation of Labor, the most important question that came before the convention concerned the advertise-

ment of trade union labels and increasing the sale of union-label products. It was decided to issue a "Label Bradstreet," giving the location of every trade using a trade label, the membership of each union, the occupation of the members, and their rates of wages. It was also decided to place the publication of the book in charge of a delegate to the American Federation of Labor, and to pay a sufficient salary to insure the employment of a man of superior ability. The proposition of the Boston Central Labor Union to hold a conference of New England Central Labor Unions was endorsed, with the amendment that the New England State branches of the American Federation of Labor should be given representation in the conference. The chairman of the legislative committee presented the following report:

The principal labor bills of the year which were enacted and engrossed were as follows:

A bill for the better protection of trade labels.

For the regulation of the manufacture and sale of clothing made in tenement houses.

The 10-hours-in-12 bill for street railway employés, amended so as to nullify its use.

Creating a superintendent of State printing.

Providing for specification of factory labor.

Nine hours for contract labor on State work.

The four following measures were defeated:

To regulate the hours of labor of railroad employés.

Constituting eight hours a day's work for State, city, county and town employés.

To regulate the hours of labor of tour workers.

The 56-hour bill for women and children employed in manufacturing establishments.

The report further stated:

"Our affiliated unions, whose products bear a union label, have reason to congratulate themselves upon a label law, which, while not all that could be desired, is yet an improvement over anything that before existed in this State.

"The various bills looking for shorter hours for the factory women and children unhappily met with defeat, and there was not that unanimity of sentiment among the representatives of the factory centres which is the prime essential to the further advance of this movement. We are of opinion that an appeal should be made by this body to the organized labor of the other New England States to try and bring their respective States to at least a level with Massachusetts in the matter of factory laws."

**11th.** — The Master Horseshoers Association met and admitted 11 members. Reports were made which showed that all but 23 of the 163 master horseshoers of Boston were in the ranks of the association.

**12th.** — At the New England convention of plumbers held in Boston, plumbers unions of Boston, Fall River, Worcester, Lynn, Lowell, Springfield, Holyoke, Hartford, New Haven, Meriden, Waterbury, Providence, Fitchburg, New Bedford, and other cities were represented. The reports submitted showed that every union represented was in a flourishing condition; that wages were being gradually raised through the efforts of the unions; that there was a prospect of reducing the hours of labor; and that it was difficult for a non-union plumber to obtain employment in the large towns. — At a meeting of the Teamsters and Coal Handlers Union, 35 new members were admitted and 47 applications for membership received.

**14th.** — Firemen's Protective Union 6130 organized with 150 members; officers were installed and the charter was received from the American Federation of Labor. — At a meeting of the Bricklayers Union it was reported that the union was the second strongest, financially considered, of all the unions in the International Masons Association.

**22nd.** — At a meeting of Floor Layers Union, seven new members were admitted and the initiation fee raised to \$3.

**25th.** — The New Bedford Spinners Union voted to levy \$1.25 per week on every member until the mills ran on full time.

**27th.** — At a meeting of Union No. 1 of the United Garment Workers, it was voted to assess the members who were working 10 per cent of their weekly wages for the relief of the unemployed members of the union.

## SEPTEMBER.

**3rd.** — At a conference held between committees from the Master Steam Fitters Union and the Journeymen Steam Fitters Union, these shop rules were adopted, to go into effect Sept. 3 and to stand for one year: "That master fitters employ only union men, and that the latter will only work for members of the association; that board will be paid for men working out of town, and that all overtime be paid as double time; that apprentices shall serve a term of two years; that there shall be one apprentice to every six journeymen, and the establishment of a minimum rate of wages."

**7th.** — At a meeting of the Roofers Protective Union, 10 members were admitted, making a total membership of 98. — At a meeting of the Stationary Engineers a discussion was held on



the subject of the consumption of water as theoretically shown by the indicator card. A communication was received from the United Garment Workers, in reference to the troubles of that organization, and the members declared themselves in sympathy with the troubled workers, and declared that they would purchase none but white-label clothing. — Floor Layers Union 558, Furniture Workers Union 24, and the Boston Cooks Alliance endorsed the garment workers in their controversy with the Clothing Manufacturers Association, and voted to purchase no clothing not bearing the union label. — At a meeting of the Steam Fitters' Helpers Union resolutions were adopted to purchase no goods of any storekeeper who sold non-union made goods; 25 new members were admitted. — A new typographical union was organized in Taunton with 15 charter members. — The Clothing Trades Council met and considered the grievances of the rubber workers; delegates from the different unions of rubber workers complained that the manufacturers were discriminating against union members, and laying them off on the plea that there was no work, while non-union persons were given employment.

10th. — A new organization of pressmen was formed and officers elected. — At a meeting of Carpenters Union 33, several applications for membership were received and 33 new members admitted.

11th. — It was reported at a meeting of the Journeymen Stairbuilders Union that work in this craft was good, with every union man at work; the financial officers reported that the treasury was in a strong condition, with 85 members in good standing. — On account of the suspension of Pressmen's Union 25 from the United Garment Workers of America, 53 members of the union formed an independent organization to be known as the Clothing Pressmen's Protective Union. — At a meeting of the Hoisting and Portable Engineers Union eight new members were admitted. — The Journeymen Stairbuilders Union initiated five candidates and six applications for membership were acted upon.

17th. — At a meeting of Freight Handlers Assembly 3708, K. of L., 15 new members were admitted. — It was reported at a meeting of the Carpenters District Council that 58 new members had joined the various local unions during the past week. — Freight Handlers Assembly 688, K. of L., admitted 12 new members. — A mass meeting of bakers was held under the auspices of Bakers Unions 1 and 5, for the purpose of organizing the trade under one head. Addresses were made and at their conclusion a union was formed and officers elected. — At a meeting of United Garment Workers Union 1 over 50 pressmen were admitted. — Health Department Union 6064, A. F. of L., admitted 15 new members. — At a meeting of Boiler Makers Union 10, resolutions were adopted condemning the action of the theatrical managers of Boston for refusing to reinstate their locked-out men and calling upon all members to refrain from patronizing a theatre where the locked-out men were not reinstated. The organizing committee were instructed to form a new union in Holyoke, and 8 applicants for membership were received.

18th. — At a meeting of Carpenters Union 33, 28 new members were admitted. — An assembly of moss gatherers was organized at Scituate with 50 charter members. — A workingmen's mutual benefit association was organized and officers elected; it was voted that only members of labor organizations bearing a paid up due card would be eligible for membership, and that the benefits would be \$6 per week, with doctor and medicines in cases of sickness and \$150 at death. It was decided to meet every Monday night.

19th. — At a meeting of Stablemen's Assembly 6627, K. of L., 18 new members were admitted and 25 applications for membership acted upon.

28th. — Since the reduction in wages it was stated, at New Bedford, the membership of the local Weavers Union increased from 700 to 1,150. — At a meeting of the Upholsterers Union, 25 new members were admitted. — The wharf and bridge builders and pile drivers held a mass meeting and a union was formed with 85 charter members. — At a meeting of Stonemasons Union 1 the reports of the financial officers showed the organization to be in a flourishing condition; five new members were admitted.

## OCTOBER.

1st. — The following organizations admitted new members: Practical Stone Masons Union 1, 5; Boston Water Works Assembly 479, K. of L., 4; Health Department Union 6064, 10. — Bakers Progressive Union 5 received a delegation from Lynn which expressed a desire to organize a local union of the craft in that city, to be under the jurisdiction of the New England union; 23 new members were enrolled, and it was decided to meet the first and third Saturdays. — At a meeting of Garment Workers Union 1, it was reported that several manufacturers were negotiating with the council in relation to the adoption of the trade label of the craft. — The Pant Makers Union decided to approve the action of the district council of the clothing trade in its attitude toward certain wholesale clothing dealers of Boston. The boycotts levied

by the district council against members of the Clothing Manufacturers Association were also endorsed.

**2nd.**—The label of the United Garment Workers of America was endorsed at a meeting of Bricklayers Union 3, and every man present pledged himself not to purchase any ready-made clothing not bearing the union label. — Workingmen's Sick Benefit and Protective Union held a meeting and appointed a physician to whom all members were to go for medical treatment; 10 new members were enrolled.

**3rd.**—Painters and Decorators Union 11 initiated 14 candidates and four new members were admitted to Stablemen's Assembly 6627, K. of L.

**12th.**—At a meeting of Furniture Workers Union 53, 9 new members were admitted and 12 applied for admission. — The house framers were organized with 40 charter members; officers were elected and installed. — At a meeting of Local Assembly 1675, K. of L., composed of employes of the sewer department, 20 new members were admitted. Owing to a prevalent impression in the assembly some time ago that the city hall authorities were not in sympathy with organized labor, a letter of inquiry upon that subject was sent to the superintendent of streets; his reply, which was read in the assembly, gave satisfaction to the members.

**13th.**—By a unanimous vote, Olgar Makers Union 97 endorsed the label of the United Garment Workers of America, and voted to recommend to its members not to purchase any ready-made clothing which did not have this stamp of unionism upon the same.

**14th.**—At a meeting of the Brewers Union 14, resolutions were adopted condemning the action of the committees of Assemblies 2106 and 858, K. of L., in ordering a strike. A committee was appointed to visit the clothing stores of Roxbury and inform the proprietors that the union had endorsed the label of the United Garment Workers, and the members would buy no goods that did not bear it. — At a meeting of the Pant Makers Union it was decided to admit the vest makers to membership in the union, and 12 applications were received. — A new union of gasfitters was organized with 25 charter members.

**17th.**—About 40 delegates representing the Knights of Labor of Massachusetts attended the quarterly meeting of the State Assembly. The report of the secretary was to the effect that 94 assemblies, with a membership estimated at about 33,000, were now within the jurisdiction of the State organization. Resolutions were adopted favoring a 54-hour law for women and minors in manufacturing establishments, compulsory weekly payments of wages, eight hours for all county, city, and town employes, the employment of citizens direct on public works and not through contractors, and the better ventilation of workshops. The meeting also endorsed the early closing movement of retail stores in South Boston. — At a meeting of the Stairbuilders Union it was decided to open a school of instruction in stairbuilding in Wells Memorial Hall. — The members of the Walters Benevolent Association celebrated the 30th anniversary of the society with a supper and musical and literary entertainment; the secretary stated that during its existence the association had expended \$55,000 in sick and death benefits.

**21st.**—At a meeting of the Pant Makers Union 53, 85 vest makers were admitted into the organization. The action of the Trades Council in levying a 50-cent assessment for the purpose of pushing and advertising the union label was endorsed, as was also the strike of the employes of the Plymouth Rock Pants Co.

**22nd.**—Theatrical Mechanics Protective Union 6803, A. F. of L., admitted 15 new members. Resolutions were adopted pledging the theatrical mechanics to stand by the striking clothing cutters. — Ten members were admitted by Hebrew Carpenters Union 56. — Freight Handlers Assembly 5572, K. of L., endorsed the position of the Knights of Labor in the brewery boycott. The meeting also endorsed the striking clothing cutters.

**29th.**—A new local union of the International Bakers and Confectioners Union was formed at Lynn by the organizing committee of Union No. 4, making the fifth local of bakers formed during the past week.

**30th.**—Five new members were admitted at a meeting of Carpenters Union 33.

## NOVEMBER.

**1st.**—The Job, Cylinder, and Adams Pressmen's Union was organized with 75 members. — The Plasterers Union voted to sustain the coal handlers and teamsters in their efforts to avoid delivering coal after 5 P.M. — Newspaper Makers Union admitted three new members, and listened to a report from the committee which was to co-operate with the committee of the International Typographical Union in securing the passage of a law providing for the government ownership and control of all telegraph and telephone lines. — The executive committee of Machinists Union No. 264 reported that the 10 per cent reduction in wages had been resisted by the men. Communications from the Kansas City lodge reported a strike on the Armour Packing Co. of that city.

**2nd.** — At a meeting of the Longshoremen's Union \$60 was disbursed for sick benefits and six new members were admitted. — The Framers Union admitted six new members.

**5th.** — A new union was organized at Lowell under the Bakers and Confectioners International Union, with 41 charter members.

**13th.** — Arrangements were made at a meeting of the Hoisting and Portable Engineers for the formation of a class for instruction on safety valves and other matters of interest to the craft. — At a meeting of the Building Trades Council resolutions were adopted denouncing the employment of convict labor in competition with honest citizens and taxpayers, and a committee was appointed to wait upon the prison commissioners and protest against it.

**15th.** — The following organizations endorsed the action of the Central Labor Union in condemning the brewery boycott: Electrical Workers; Painters and Decorators; Porters; Iron Dressers; and Iron Moulders. Delegates from the Central Labor Union addressed each meeting and explained the position of the Knights of Labor toward Brewers Union 14. In every case it was voted not to patronize any saloon keeper who refused to sell union made beer.

**19th.** — The Marble Cutters and Lasters Unions each admitted 15 new members. — Eight new members were admitted to Bakers Union 2. — At a special meeting of Building Laborers Union 6 the brewery boycott was endorsed and the position of the Knights of Labor in the controversy commended. — The executive board of Conductors, Drivers, and Motormen's Union 3873 endorsed the action of the Boston Central Labor Union and condemned that of the Knights of Labor in the brewery controversy.

**20th.** — A branch of the United Garment Workers of America was organized in East Boston to be composed of women workers; 66 charter members were enrolled.

## DECEMBER.

**14th.** — The Clothing Trades Council held a meeting and endorsed the petition of the International Typographical Union to Congress in favor of the government ownership and control of the telegraph. — At a meeting of the Inside Electrical Wiremen's Union resolutions were adopted protesting against the action of the Building Trades Council in demanding that all overhead wires be placed under ground.

**17th.** — At a meeting of the United Garment Workers it was voted to assess each member 50 cents, the money to be applied in the controversy with the Clothing Manufacturers Association. — At a meeting of the Carpenters City Council a committee of three was appointed to investigate cases of destitution among the members of the union and relieve the same. The council paid out \$142 for similar purposes during the past week. — As a result of a concerted movement by the unions of machinists of this country affiliated with the international organizations of the craft, the district council of the organization voted in favor of eliminating the color line from the constitution of the body; 13 lodges were represented, and the reports from each affiliated union showed an increase in membership.

**19th.** — A meeting of the garment workers was held under the auspices of the United Garment Workers Union, to protest against work being sent away while thousands of operatives were unemployed. The following resolutions were presented and adopted:

"Whereas, in view of the fact that thousands of garment workers, both men and women, in the city of Boston are on the verge of starvation through having no means of employment; and,

"Whereas, the Boston clothing manufacturers are daily sending out thousands of garments to be made in the disease infected tenement houses of New York, thereby depriving the citizens of Boston of their fair share of work and forcing them to become paupers and dependent on public charity; therefore, be it

"Resolved, That we, the unemployed garment workers of Boston, in mass meeting assembled, do hereby protest against such action of the Boston clothing manufacturers; and be it further

"Resolved, That we call upon the mayor and the citizens' committee to form such plans as will provide that the unemployed garment workers shall be relieved, not by charity but by work at their trades."

Eighteen new members were admitted at a meeting of the Gasfitters Union. — A constitution and by-laws were adopted at a meeting of Slate and Metal Roofers Union.

**28th.** — John Ericsson Lodge, I. O. of M., voted to so amend its constitution that colored men might be admitted to membership with full privileges.

**LABOR LEGISLATION — 1894.**

[CHAP. 60.]

**AN ACT RELATIVE TO THE POWERS OF FRATERNAL BENEFICIARY CORPORATIONS WHICH LIMIT THEIR MEMBERSHIP TO THE PERMANENT EMPLOYEES OF THE COMMONWEALTH AND OF TOWNS AND CITIES.**

*Be it enacted, etc., as follows:*

**SECTION 1.** Every corporation now or hereafter organized under or conducting its business in accordance with the provisions of chapter four hundred and twenty-nine of the acts of the year eighteen hundred and eighty-eight and acts in amendment thereof or supplementary thereto, which limits its membership to the permanent employees of the Commonwealth and of towns and cities, and which pays only annuities or gratuities contingent upon disability or long service, shall not be subject to the limitations contained in said chapter and acts as to the amount of funds to be held for purposes of its organization, and may accept and hold gifts, legacies or other contributions therefor.

**SECTION 2.** This act shall take effect upon its passage. [*Approved March 2, 1894.*]

[CHAP. 119]

**AN ACT FOR THE PROTECTION OF THE PUBLIC HEALTH IN THE CITY OF BOSTON.**

*Be it enacted, etc., as follows:*

**SECTION 1.** Whenever the board of health of the city of Boston shall adjudge that the public health requires and shall order that the surface of any private passageway in said city shall be paved or otherwise provided with a road bed, the owners of said private passageway shall forthwith pave or lay said road bed in accordance with said order and in a manner and with materials satisfactory to said board.

**SECTION 2.** In case of objection by any owner of property to the paving of such private way that may be so ordered, the board of health, or a majority thereof, shall view the premises and, if so desired, give a hearing to parties interested.

**SECTION 3.** Any justice of any court having jurisdiction in equity may, on the petition of the board of health of said city, enforce the provisions of this act by any proper process or decree.

**SECTION 4.** This act shall take effect upon its passage. [*Approved March 15, 1894.*]

[CHAP. 180.]

**AN ACT RELATIVE TO INTELLIGENCE OFFICES.**

*Be it enacted, etc., as follows:*

**SECTION 1.** The keeper of an intelligence office shall not receive or accept any sum of money from a person seeking employment through the agency of such office, unless employment of the kind demanded is furnished.

**SECTION 2.** If a person receiving employment through the agency of an intelligence office is discharged by his employer within ten days from the time of entering upon such employment, and such discharge is not caused by the inability, incompetency or refusal of such person to perform the work required, or by other fault of the person employed, the keeper of such intelligence office shall refund to such person on demand five sixths of any sum paid to such keeper by the employer on account of such employment.

**SECTION 3.** The officers of towns and cities charged with the duty of granting licenses to keepers of intelligence offices shall cause this act to be printed on each such license. They shall also cause to be prepared and shall furnish to each keeper of a licensed intelligence office copies of this act, printed upon cardboard in type of a size not smaller than pica, and each licensee shall conspicuously post in each room occupied by him for the purpose of such intelligence office, three of said printed copies.

**SECTION 4.** If a keeper of an intelligence office violates any of the provisions of this act his license shall be revoked, and he shall be punished by fine of not less than twenty-five dollars nor more than fifty dollars for each offence. [*Approved March 30, 1894.*]

## [CHAP. 238.]

**AN ACT TO PROVIDE FOR THE APPOINTMENT OF A BOARD TO CONSIDER THE SUBJECT OF THE UNEMPLOYED AND MEASURES FOR THEIR RELIEF.***Be it enacted, etc., as follows :*

**SECTION 1.** The governor, by and with the advice and consent of the council, shall appoint a board to consider the subject of the unemployed and measures for their relief. Said board shall consist of three persons, whose terms of office shall commence at the time of their appointment and expire on the second Wednesday of March in the year eighteen hundred and ninety-five. Vacancies in said board shall be filled by the governor, by and with the advice and consent of the council.

**SECTION 2.** Said board shall forthwith proceed to investigate and consider the general question of the unemployed in the Commonwealth, and what practical relief measures can be adopted by the Commonwealth or its several municipalities. The bureau of statistics of labor, the heads of state departments, and the officials of the several cities and towns shall, so far as practicable, assist said board by furnishing, when requested by it, statistics or information based upon records or documents in their respective offices or upon facts coming under their observation. Said board shall also inquire into the methods adopted upon private or public initiative in this Commonwealth, and in other states and countries, for dealing with the question of the unemployed, their general results and how far such methods would be applicable in this Commonwealth. Said board shall also inquire into the practices now prevailing as to the employment of convict labor in the prisons and penal institutions of the Commonwealth, and whether such practices affect those who may be employed in the same lines of labor carried on by private business enterprise, or harmfully interfere with manufacturing interests. Said board shall make its final report to the general court in print on or before the second Wednesday in March in the year eighteen hundred and ninety-five; and if any legislation is recommended by said board it shall embody in its report drafts of bills in accordance with such recommendations.

**SECTION 3.** Said board may confer with the metropolitan park commission, the metropolitan sewerage commission, the park commissions and water boards of the several cities of the Commonwealth, and the heads of other state and city departments employing labor, with a view to determining what measures can be taken immediately for increasing the employment of labor to the public advantage, and shall report as soon as practicable to the general court the result of such conferences and their recommendations. Said board may make further reports from time to time to the general court, when in session, up to the time fixed for their final report; and in each case when legislation is recommended said board shall embody in its report a draft of a bill in accordance with such recommendation.

**SECTION 4.** Said board may co-operate with county, city and town authorities in devising methods of discriminating between confirmed vagrants and those willing to work but unable to obtain employment, and may make experimental application of tests for the purpose of such discrimination in any towns or cities, in co-operation with the local authorities, and may with the co-operation of local authorities, public boards or private organizations devise measures for securing a uniform system of registration and investigation of the qualifications of persons applying for employment.

**SECTION 5.** The bureau of statistics of labor in taking the state census in the year eighteen hundred and ninety-five shall incorporate in its schedules such questions relative to the number of vagrants or tramps and of unemployed laborers as are proposed by the board created by this act and approved by the governor and council.

**SECTION 6.** Said board shall receive such compensation and may incur such expenses for carrying out the provisions of this act as the governor and council shall approve: *provided*, that the whole amount expended under the provisions of this act shall not exceed fifteen thousand dollars.

**SECTION 7.** This act shall take effect upon its passage. [Approved April 12, 1894.]

## [CHAP. 285.]

**AN ACT RELATIVE TO PROTECTING PERSONS, ASSOCIATIONS OR UNIONS OF PERSONS IN THEIR LABELS, TRADE-MARKS AND FORMS OF ADVERTISING.***Be it enacted, etc., as follows :*

Section three of chapter four hundred and forty-three of the acts of the year eighteen hundred and ninety-three is hereby amended by striking out in the first line, the words "Every manufacturer who," and inserting in place thereof the word:—Whoever,—so as to read as follows:—*Section 3.* Whoever shall knowingly use or affix the genuine label or trade-mark

adopted by any person, association or union, as herein provided, and filed in the office of the secretary of the Commonwealth, as provided in section four of this act, upon any goods not manufactured by such person, or by a member or members of such association or union, shall be punished by a fine not exceeding two hundred dollars or by imprisonment not exceeding one year, or both such fine and imprisonment. [Approved April 20, 1894.]

## [CHAP. 320.]

AN ACT RELATING TO INSTRUCTION IN THE USE OF TOOLS AND IN COOKING IN PUBLIC SCHOOLS.

*Be it enacted, etc., as follows:*

SECTION 1. Section one of chapter forty-four of the Public Statutes as amended by chapter sixty-nine of the acts of the year eighteen hundred and eighty-four is hereby further amended by striking out in the eighth line, the words "hygiene and the elementary use of hand tools," and inserting in place thereof the words:—hygiene, and the use of tools, and cooking,—so as to read as follows:—*Section 1.* In every town there shall be kept, for at least six months in each year, at the expense of said town, by a teacher or teachers of competent ability and good morals, a sufficient number of schools for the instruction of all the children who may legally attend public school therein, in orthography, reading, writing, English grammar, geography, arithmetic, drawing, the history of the United States, and good behavior. Algebra, vocal music, agriculture, sewing, physiology, hygiene, and the use of tools, and cooking, shall be taught, by lectures or otherwise, in all the public schools in which the school committee deem it expedient.

SECTION 2. In any city or town where instruction shall be given in the use of tools and in cooking in public schools, such tools and the implements and materials required for teaching cooking or the use of tools may be purchased by the school committee, at the expense of such city or town, and shall be loaned to such pupils as may be allowed to use them, free of charge, subject to such rules and regulations as the school committee may prescribe.

SECTION 3. Chapter sixty-nine of the acts of the year eighteen hundred and eighty-four is hereby repealed; but nothing herein contained shall be construed as repealing or modifying chapter three hundred and thirty-two of the acts of the year eighteen hundred and eighty-five.

SECTION 4. This act shall take effect upon its passage. [Approved April 27, 1894.]

## [CHAP. 341.]

AN ACT FOR THE BETTER PROTECTION OF HUMAN LIFE IN LODGING HOUSES IN CASE OF FIRE.

*Be it enacted, etc., as follows:*

SECTION 1. Every owner, lessee, proprietor or manager of a lodging house containing ten or more rooms above the second story shall, on or before the first day of October in the year eighteen hundred and ninety-four, place or cause to be placed, a knotted rope or other better appliance for use as a fire escape, in every room in said lodging house used as a lodging room, except rooms on the ground floor. Such rope or other better appliance shall be securely fastened, coiled and exposed, and shall contain knots and a loop, and shall conform in size and length and in all other respects to the requirements of section one of chapter three hundred and seven of the acts of the year eighteen hundred and ninety.

SECTION 2. The provisions of sections two and three of said chapter three hundred and seven shall be applicable to the provisions of section one of this act. [Approved May 4, 1894.]

## [CHAP. 342.]

AN ACT RELATING TO LOANS BY CO-OPERATIVE BANKS.

*Be it enacted, etc., as follows:*

SECTION 1. Section thirteen of chapter one hundred and seventeen of the Public Statutes, as amended by section one of chapter one hundred and fifty-nine of the acts of the year eighteen hundred and eighty-nine, is hereby further amended by striking out in the first and second lines, the words "secured by the first mortgage of real estate situated in this Commonwealth," by inserting in the third line, after the word "borrower," the words:—and secured by a mortgage of real estate situated in this Commonwealth, unencumbered by any mortgage or lien other than such as may be held by the bank making the loan,—and by striking out in said third line, the word "share," and inserting in place thereof the word:—shares,—so as to read as follows:—*Section 13.* For every loan made a note shall be given, accompanied by a transfer and pledge of the shares of the borrower, and secured by a mortgage of real estate situated in this Common-



wealth, unencumbered by any mortgage or lien other than such as may be held by the bank making the loan. The shares so pledged shall be held by the corporation as collateral security for the performance of the conditions of said note and mortgage. Said note and mortgage shall recite the number of shares pledged and the amount of money advanced thereon, and shall be conditioned for the payment at the stated meetings of the corporation of the monthly dues on said shares, and the interest and premium upon the loan, together with all fines on payments in arrears, until said shares reach the ultimate value of two hundred dollars each, or said loan is otherwise cancelled and discharged: *provided*, that the shares without other security may in the discretion of the directors be pledged as security for loans, to an amount not exceeding their value as adjusted at the last adjustment and valuation of shares before the time of the loan.

If the borrower neglects to offer security satisfactory to the directors within the time prescribed by the by-laws, his right to the loan shall be forfeited, and he shall be charged with one month's interest and one month's premium at the rate bid by him, together with all expenses, if any, incurred; and the money appropriated for such loan may be re-loaned at the next or any subsequent meeting.

**SECTION 2.** When a member of a co-operative bank purchases money at a lower rate than that paid by him on an existing loan, secured by a mortgage, for the purpose by him declared of reducing the premium or rate of interest upon said loan, no new mortgage shall be required, but an agreement in writing for the reduction of said premium or rate of interest, signed by said borrowing member and the secretary of the bank, with the written approval of the president, shall be valid, and shall in no respect impair or affect the existing mortgage contract; and thereafter said borrowing member shall make the monthly payments on said loan in accordance with the terms of said agreement, and the sum of money previously so purchased by him may be resold by the bank at the same meeting. The borrower shall be required to give notice to the secretary before the sale, if he intends to re-buy his money. Nothing in this section shall be construed to exempt the re-borrower from paying the interest and premium for the current month on the loan made by him for the substitution of which the new loan is made. [*Approved May 4, 1894.*]

[CHAP. 437.]

AN ACT RELATIVE TO THE INTIMIDATION OF LABORERS.

*Be it enacted, etc., as follows:*

Chapter three hundred and thirty of the acts of the year eighteen hundred and ninety-two is hereby amended by inserting in the fourth line, after the word "become," the words:— or continue to remain,— and by adding at the end of said chapter, the following words:— but no organization shall be considered to be a labor organization, within the meaning of this act, whose officers, agents or members seek, directly or indirectly, to accomplish its objects and purposes by intimidation or force, or other unlawful means,— so as to read as follows:— Any person or corporation, or agent or officer on behalf of such person or corporation, who shall hereafter coerce or compel any person or persons to enter into an agreement, either written or verbal, not to join or become or continue to remain a member of any labor organization, as a condition of such person or persons securing employment or continuing in the employment of any such person or corporation, shall be punished by a fine of not more than one hundred dollars; but no organization shall be considered to be a labor organization, within the meaning of this act, whose officers, agents or members seek, directly or indirectly, to accomplish its objects and purposes by intimidation or force, or other unlawful means. [*Approved May 26, 1894.*]

[CHAP. 451.]

AN ACT IN RELATION TO CONTRACTS FOR PRISON LABOR.

*Be it enacted, etc., as follows:*

**SECTION 1.** Whenever the principal officer of any prison or reformatory and the general superintendent of prisons shall consider it expedient to employ the inmates of such institution, or any part of them, in the manufacture of articles upon the piece-price plan, said officer and superintendent shall advertise for bids for their employment.

**SECTION 2.** Said bids shall be opened publicly, and said superintendent shall keep a copy and record of all bids. If, in the opinion of said officers, it shall not be expedient to accept any of said bids, contracts may be made with other persons than said bidders, without further advertisement, in the manner now provided by law. Copies of all contracts for the employment of prisoners shall be kept by the general superintendent of prisons, and they shall be open to public inspection at all times.

**SECTION 3.** This act shall take effect upon its passage. [*Approved June 5, 1894.*]

## [CHAP. 455.]

**AN ACT RELATIVE TO THE LICENSING OF PLUMBERS AND THE SUPERVISION OF THE BUSINESS OF PLUMBING.**

*Be it enacted, etc., as follows:*

**SECTION 1.** No person, firm or corporation shall engage in or work at the business of plumbing, either as a master or employing plumber, or as a journeyman plumber, unless such person, firm or corporation has received a license or certificate therefor in accordance with the provisions of this act. The words "practical plumber," as used in this act, shall be deemed to mean a person who has learned the business of plumbing, by working for at least two years either as an apprentice or under a verbal agreement for instruction, and who has then worked for at least one year as a first class journeyman plumber. The word "journeyman," as used in this act, shall be deemed to mean one who personally does any work in plumbing which is subject to inspection, under chapter four hundred and nineteen of the acts of the year eighteen hundred and ninety-two, or under any ordinance, by-law, rule or regulation made under the authority of this act.

**SECTION 2.** Any person not engaged in or working at the business of plumbing prior to the tenth day of July in the year eighteen hundred and ninety-three, and desiring to engage in or work at said business, either as a master or employing plumber, or as a journeyman plumber, shall apply to the board of health having jurisdiction in the locality where he intends to engage in or work at said business, except in cities or towns where the inspector of buildings has control of the enforcement of the regulations regarding plumbing, where such application shall be made to the inspector of buildings, and shall, at such time and place as may be designated by the board of examiners hereinafter provided for, to whom such applications shall be referred, be examined as to his qualifications for such business. On or before the first day of September in the year eighteen hundred and ninety-four every master or employing plumber, and every journeyman plumber, engaged in or working at the business of plumbing in this Commonwealth prior to the tenth day of July in the year eighteen hundred and ninety-three, and desiring to engage in or work at said business in any city or town where licenses for plumbers are required, shall personally register his name and address at the office of the board of health or of the inspector of buildings to whom applications for licenses are to be made in such city or town, and state after being sworn where and how long he has been engaged in or has worked at said business and whether as a master or employing plumber, or as a journeyman plumber. Said board of health or inspector of buildings, if satisfied that the person so registering was actually engaged in or working at said business prior to said date shall thereupon issue to him a certificate, setting forth that he was engaged in or working at the business of plumbing either as a master or employing plumber, or as a journeyman plumber, as the case may be, prior to the tenth day of July in the year eighteen hundred and ninety-three, and authorizing him to engage in or work at said business, either as a master or employing plumber, or as a journeyman plumber. The fee for a certificate for a master or employing plumber shall be two dollars; for a journeyman plumber it shall be fifty cents. Said certificates shall be valid and have force throughout the Commonwealth. In the case of a firm or corporation the examination and licensing of, or the registration of and granting a certificate to, any one member of the firm or the manager of the corporation shall satisfy the requirements of this act.

**SECTION 3.** There shall be in every city, and in each town of five thousand inhabitants or more, and in each town having a system of water supply or sewerage, a board of examiners of plumbers, consisting of the chairman or such other member of the board of health as said board may designate, and in cities or towns having an inspector of buildings, the inspector of buildings of said city or town, who shall be members ex officio of said board and serve without compensation, and a third member, who shall be a practical plumber of at least five years' continued practical experience either as a master or as a journeyman during the years next preceding the date of appointment. Said third member shall be appointed by the board of health of said city or town within three months from the passage of this act, for the term of one year from the first day of May in the year of appointment, and thereafter annually before the first day of June, and shall be allowed a sum not exceeding five dollars for each day of actual service, to be paid from the treasury of said city or town: *provided*, that if in any city or town there is no inspector of buildings, said board of health shall also appoint the second member of said board of examiners, whose term of office and compensation shall be the same as is heretofore provided for said third member.

**SECTION 4.** Said board of examiners shall, as soon as may be after the appointment of said third member, meet and organize by the selection of a chairman, and shall then designate the times and places for the examination of all applicants desiring to engage in or work at the business of plumbing within their respective jurisdictions. Said board shall examine said



applicants as to their practical knowledge of plumbing, house drainage and plumbing ventilation, and shall submit the applicant to some satisfactory form of practical test, and if satisfied of the competency of the applicant shall so certify to the board of health or inspector of buildings in their respective city or town. Said board or inspector shall thereupon issue a license to such applicant, authorizing him to engage in or work at the business of plumbing, either as a master or employing plumber, or as a journeyman plumber. The fee for a license for a master or employing plumber shall be two dollars; for a journeyman plumber it shall be fifty cents. Said licenses shall be valid and have force throughout the Commonwealth, and shall be renewed annually upon a payment of a fee of fifty cents. In case of removal beyond the jurisdiction of the board or inspector issuing the original license it may be renewed by any board having like authority.

**SECTION 5.** The board of health, or inspector of buildings where such inspector has control of the enforcement of the regulations regarding plumbing, of each city and town mentioned in section three of this act, shall, within three months from the passage of this act, appoint one or more inspectors of plumbing, who shall be practical plumbers of at least five years' continued practical experience, either as masters or as journeymen, during the years next preceding the date of appointment, and who shall hold office until removed by said board or inspector for cause, which must be shown. All such inspectors shall before appointment be subjected to an examination before the civil service commission. The compensation of such inspectors shall be determined by the board or inspector appointing them, subject to the approval of the city council or selectmen, and shall be paid from the treasury of their respective cities or towns. Said inspectors shall inspect all plumbing work for which permits are hereafter granted within their respective jurisdiction, in process of construction, alteration or repair, and shall report to said board or inspector all violations of any law, ordinance, by-law, rule or regulation relating to plumbing work; and also perform such other appropriate duties as may be required. The approval of any plumbing by any other inspectors than those provided for under this act shall not be deemed a compliance with the provisions thereof.

**SECTION 6.** No inspector of plumbing in any city or town shall inspect or approve any plumbing work done by himself, or any person by whom he is employed, or who is employed by or with him, but in each city or town subject to the provisions of this act the board of health shall appoint an additional inspector of plumbing, in the same manner and subject to the same qualifications as the regular inspector of plumbing, whose duty it shall be to inspect, in the manner prescribed in this act, plumbing work done by the regular inspector or any person by whom he is employed, or who is employed by or with him. Said additional inspector shall have authority to act in case of the absence or inability of the regular inspector, and shall receive for his services such compensation as the regular inspector would for a like duty. The provisions of this section shall not apply to any city or town which has heretofore established or may hereafter establish an annual salary for the position of inspector of plumbing, and in any such city or town no inspector of plumbing shall engage in or work at the business of plumbing.

**SECTION 7.** Each city or town of five thousand inhabitants or more, and every town having a system of water supply or sewerage, shall by ordinance or by-law, within six months from the passage of this act, prescribe rules and regulations for the materials, construction, alteration and inspection of all pipes, tanks, faucets, valves and other fixtures by and through which waste water or sewerage is used and carried; and provide that no such pipes, tanks, faucets, valves or other fixtures shall be placed in any building in such city or town except in accordance with plans which shall be approved by the board of health of such city or town, or the inspector of buildings, where such inspector has control of the enforcement of the regulations regarding plumbing; and shall further provide that no plumbing work shall be done, except in the case of repair of leaks, without a permit being first issued therefor, upon such terms and conditions as such cities or towns shall prescribe. But nothing in this section shall prevent boards of health from making such rules and regulations in regard to plumbing and house drainage hitherto authorized by law, which are not inconsistent with any ordinance or by-law made under the authority of this section by the respective cities or towns within which such boards of health have jurisdiction. The provisions of this section shall not apply to the city of Boston or to any officer or board thereof.

**SECTION 8.** Any person violating any provision of this act, or any ordinance, by-law, rule or regulation made thereunder, shall be deemed guilty of a misdemeanor, and be subject to a fine not exceeding fifty dollars for each and every violation thereof, and if such person has received a license under this act his license may be revoked by the board or inspector issuing the same; and if such violation was committed in a city or town other than that where he received his license, the board of health or inspector of buildings having jurisdiction may forbid him to engage in or work at the business of plumbing for a period not exceeding one year in the city or town where the violation was committed. If any person to whom a certificate has been issued under this act violates any provision thereof, or any ordinance, by-law, rule or regulation made

thereunder, either the board of health or inspector of buildings issuing his certificate, or the board of health or inspector of buildings having jurisdiction where such violation was committed, may forbid him to engage in or work at the business of plumbing in such city or town for a period not exceeding one year. Any person engaging in or working at the business of plumbing in any city or town where he has been forbidden so to do under this section shall be deemed guilty of a misdemeanor, and be subject to a fine not exceeding one hundred dollars for every such offence. Any city or town mentioned in section three of this act refusing to comply with any of the provisions of this act shall forfeit the sum of fifty dollars to the use of the Commonwealth for every month during which such neglect may continue.

**SECTION 9.** The provisions of this act shall apply to all persons who are now or may be hereafter learning the business of plumbing, when they are sent out to do the work of a journeyman plumber.

**SECTION 10.** Any person now holding an appointment as inspector of plumbing may retain his position, and, without further examination, be deemed to have been appointed under this act.

**SECTION 11.** The boards of health and inspectors of buildings hereinbefore mentioned may expend such portion of all fees collected by them under this act as shall become necessary to properly perform all duties imposed by the passage of this act. The said boards or inspectors shall annually, before the first day of June, make a full report in detail to their respective cities or towns of all their proceedings during the year under this act.

**SECTION 12.** All acts or parts of acts inconsistent herewith are hereby repealed. The provisions of this act so far as they are the same as those of chapter four hundred and seventy-seven of the acts of the year eighteen hundred and ninety-three shall be construed as a continuation of that chapter and not as new enactments. [*Approved June 6, 1894.*]

[CHAP. 460.]

**AN ACT RELATIVE TO THE EMPLOYMENT OF PRISONERS IN THE MANUFACTURE OF REED OR RATTAN GOODS.**

*Be it enacted, etc., as follows :*

No new contract for the employment of prisoners in the manufacture of reed or rattan goods shall be made until the expiration of existing contracts shall reduce the number so employed to seventy-five, and the general superintendent of prisons shall not thereafter approve contracts for the employment of more than seventy-five prisoners at any one time in the manufacture of such goods, in all the prisons and reformatories. [*Approved June 9, 1894.*]

[CHAP. 471.]

**AN ACT TO PROVIDE FOR MANUAL TRAINING IN CITIES OF MORE THAN TWENTY THOUSAND INHABITANTS.**

*Be it enacted, etc., as follows :*

After the first day of September in the year eighteen hundred and ninety-five every city of twenty thousand or more inhabitants shall maintain as part of its high school system the teaching of manual training. The course to be pursued in said instruction shall be subject to the approval of the state board of education. [*Approved June 14, 1894.*]

[CHAP. 499.]

**AN ACT RELATING TO THE LIABILITY OF EMPLOYERS TO MAKE COMPENSATION FOR PERSONAL INJURIES SUFFERED BY EMPLOYEES IN THEIR SERVICE.**

*Be it enacted, etc., as follows :*

**SECTION 1.** Section one of chapter two hundred and seventy of the acts of the year eighteen hundred and eighty-seven, as amended by chapter two hundred and sixty of the acts of the year eighteen hundred and ninety-two and by chapter three hundred and fifty-nine of the acts of the year eighteen hundred and ninety-three is hereby amended by inserting after the word "superintendence," in the fourteenth line, the following words:—or, in the absence of such superintendent, of any person acting as superintendent with the authority or consent of such employer; or,—so as to read as follows:—*Section 1.* Where, after the passage of this act, personal injury is caused to an employee, who is himself in the exercise of due care and diligence at the time:—(1) By reason of any defect in the condition of the ways, works or machinery connected with or used in the business of the employer, which arose from or had not been discovered or remedied owing to the negligence of the employer or of any person in the service of the employer and entrusted by him with the duty of seeing that the ways, works or machinery were in proper

condition; or (2) By reason of the negligence of any person in the service of the employer, entrusted with and exercising superintendence, whose sole or principal duty is that of superintendence, or, in the absence of such superintendent, of any person acting as superintendent with the authority or consent of such employer; or (3) By reason of the negligence of any person in the service of the employer who has the charge or control of any signal, switch, locomotive engine or train upon a railroad, the employee, or in case the injury results in death the legal representatives of such employee, shall have the same right of compensation and remedies against the employer as if the employee had not been an employee of nor in the service of the employer, nor engaged in its work. And in case such death is not instantaneous, or is preceded by conscious suffering, said legal representatives may in the action brought under this section, except as hereinafter provided, also recover damages for such death. The total damages awarded hereunder, both for said death and said injury, shall not exceed five thousand dollars, and shall be apportioned by the jury between the legal representatives and the persons, if any, entitled under the succeeding section of this act, to bring an action for instantaneous death. If there are no such persons then no damages for such death shall be recovered, and the damages, so far as the same are awarded for said death, shall be assessed with reference to the degree of culpability of the employer herein, or the person for whose negligence he is made liable. A car in use by or in the possession of a railroad company shall be considered a part of the ways, works or machinery of the company using or having the same in possession, within the meaning of this act, whether such car is owned by it or by some other company or person.

SECTION 2. This act shall take effect upon its passage. [Approved June 21, 1894.]

[CHAP. 525.]

AN ACT RELATIVE TO ITINERANT VENDORS.

*Be it enacted, etc., as follows:*

SECTION 1. Any itinerant vendor, before making any sales of goods, wares and merchandise, shall make application for a local license to the licensing board or committee of the city or town in which such goods are kept or to be kept or exposed for sale or sold by him or them, and together with such application shall file a true statement, under oath, of the average quantity and value of the stock of goods, wares and merchandise so kept or to be kept or exposed for sale. Such licensing board or committee shall submit said statement to the board of assessors of said city or town, who shall forthwith, after examination of such goods, wares and merchandise so kept or to be kept or exposed for sale, place a valuation thereon and transmit a certificate of such valuation to said licensing board or committee, whereupon said licensing board or committee shall act upon said application; and if in the judgment of said licensing board or committee said application should be granted, the city or town clerk may be authorized to issue a license to said applicant, and such clerk shall thereupon ascertain the amount to be paid for the local license, by a computation based upon the valuation placed by said board of assessors on such stock of goods, wares and merchandise so kept or exposed for sale, in the ratio and of the rate per thousand dollars of valuation of the last preceding tax levy made in such city or town; and upon receipt of the amount so fixed and ascertained shall issue to the person filing or furnishing such statement a local license authorizing the sale of such goods, wares and merchandise within the limits of such town or city, which license shall be and continue in force so long as the licensee thereunder shall continuously keep and expose for sale in such city or town such stock of goods, wares and merchandise, except that such license shall in any event terminate and expire on the first day of May next following its date. If the statement required by this section is not filed as aforesaid, the licensing board of the city or town in which such goods are so kept or exposed for sale, or where such itinerant vendor desires to sell such goods, wares and merchandise, shall thereupon fix the sum to be paid for such license, which sum shall be binding upon the parties.

SECTION 2. Section nine of chapter four hundred and forty-eight of the acts of the year eighteen hundred and ninety is hereby repealed, but such repeal shall not affect any license heretofore granted, or proceeding taken or pending thereunder. [Approved June 25, 1894.]

[CHAP. 534.]

AN ACT REQUIRING SPECIFICATIONS TO BE FURNISHED TO PERSONS EMPLOYED IN COTTON FACTORIES.

*Be it enacted, etc., as follows:*

SECTION 1. The occupier or manager of every cotton factory shall supply with each warp, to each person engaged as a weaver in said factory who is paid by the piece, cut or yard, a printed or written ticket containing the following specifications as to the work to be done and

wages paid, to wit:—The number of cuts; the number of yards per cut or piece; the price per yard, cut or piece; the number of picks per inch; the number of reeds to the inch. Said occupier or manager shall also supply to each person engaged as a frame-tender a specification of the number of roving and price per hank or hanks; and to each person engaged as a warper or web-drawer a specification of the number of threads in the warp and the rate of compensation; and to each operative who is paid by the pound a specification of the price to be paid per pound or pounds; said specification to be furnished in each case on a printed or written ticket within seven days from the time that said operative begins work.

**SECTION 2.** Any occupier or manager of a cotton factory who fails to comply with the provisions of the preceding section shall, for the first offence, be punished by fine not exceeding fifty dollars and not less than twenty-five dollars, and for each subsequent offence by fine not exceeding one hundred dollars and not less than fifty dollars.

**SECTION 3.** The members of the inspection department of the district police force shall enforce the provisions of this act. [*Approved June 29, 1894.*]

[CHAP. 43.]

**RESOLVE REQUIRING THE BUREAU OF STATISTICS OF LABOR TO INVESTIGATE THE SUBJECT OF MUNICIPAL EMPLOYMENT BUREAUS.**

*Resolved,* That the bureau of statistics of labor be instructed to inquire into the subject of the maintenance of public intelligence offices, or employment bureaus, by the cities of the Commonwealth, and report to the general court on or before the first day of May next whether it is expedient to authorize cities to establish such intelligence offices and what will be the probable annual cost of the maintenance of the same; and said bureau, if it recommends the establishment of municipal intelligence offices, shall embody in its report a draft of a bill in accordance with its recommendations. [*Approved March 29, 1894.*]

Besides the legislation contained in this summary, the existing laws relative to savings banks and institutions for savings were revised and consolidated by chapter 317; the laws governing the inspection department of the district police relative to the inspection of factories, workshops, tenements and public buildings were codified by chapter 481; those relating to the attendance of children in the schools by chapter 498; and those relating to the employment of labor by chapter 508. The legislature also passed two resolves adverse to the Wilson tariff bill, especially as to its effect upon cotton manufactures and the general business interests of the country.

## SUMMARY.

We do not pretend that this chronological record is complete, although it includes the more important events of the year. Our resources have not enabled us to verify from original sources all of the cases reported. The belief that a record of the transactions of trades unions, if continued during a series of years, would be of historical value, has led to the preparation of this Part, which is to be considered as tentative and subject to improvement in subsequent years. Some of the items, while fragmentary and possibly of slight importance in themselves, are nevertheless of value as part of a continuous historic record, and are indicative of the current movements of organized labor and of the subjects under consideration in the industrial life of the Commonwealth, from the standpoint of the wage workers. This record is intended also to form a complement to the record of industrial enterprises contained in the Industrial Chronology, which forms part of the Report on the Annual Statistics of Manufactures, issued by this Bureau.

The following table presents a summary of the principal events reported in the preceding pages :

CLASSIFICATION.	Number of Cases
Affiliation made with other unions, . . . . .	6
Annual agreements made or wage lists accepted, . . . . .	5
Constitution and by-laws adopted or amended, . . . . .	7
Grievances as to working time considered, . . . . .	17
Grievances respecting wages reported or discussed, . . . . .	9
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Wage advances granted, . . . . .	5
Wage advances refused, . . . . .	1
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Wage rates discussed, . . . . .	38
Wage reductions accepted, . . . . .	2
Wage reductions refused, . . . . .	1
Wage reductions resisted, . . . . .	1

Protests or refusals were also entered as follows: Against theatrical managers locking out men; in opposition to discrimination against female compositors; against burying wires; against sending clothing to New York to be manufactured; against the performance of other than strictly trade duties; against a sole-leather trust; against the use of Boston Common for railway purposes; and against work on buildings where non-union men have worked.

The following were endorsed: Eight hours for government employés; early closing; government control of telegraph; municipal ownership of gas; park for North End of Boston; trades councils; ventilation for workshops; withdrawal of K. of L. delegates from C. L. U.; \* working cards for union members; and the 54-hour bill for women and children.

There were 5,805 new members reported.

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\* In one reported instance this withdrawal was not endorsed.



PUBLIC DOCUMENT . . . .

. . . . No. 36.

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THE  
  
ANNUAL STATISTICS  
  
OF  
  
MANUFACTURES.

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1893.

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EIGHTH REPORT.

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BOSTON:  
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,  
18 POST OFFICE SQUARE.  
1894.





# Commonwealth of Massachusetts.

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BUREAU OF STATISTICS OF LABOR,  
CLAPLIN BUILDING, 20 BEACON STREET,  
BOSTON, July 15, 1894.

TO THE HONORABLE SENATE AND HOUSE OF REPRESENTATIVES:

I have the honor to transmit, herewith, the Annual Statistics of Manufactures for the year 1893, which have been collected and are presented in compliance with Chapter 174, Acts of 1886.

Very respectfully,

HORACE G. WADLIN,  
*Chief.*

[iii]



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THE  
ANNUAL STATISTICS OF MANUFACTURES.  
1893.

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INTRODUCTION.

This volume is the eighth report on Annual Statistics of Manufactures, issued in accordance with the provisions of Chapter 174 of the Acts of 1886.

The following table indicates the number of returns considered in these annual reports, in each year, beginning with 1886 :

YEARS.	Number of Establishments Considered	YEARS.	Number of Establishments Considered
1886, . . . . .	1,027	1890, . . . . .	3,041
1887, . . . . .	1,027	1891, . . . . .	3,745
1888, . . . . .	1,140	1892, . . . . .	4,473
1889, . . . . .	1,364	1893, . . . . .	4,397

From the above table it will be seen that the number of returns entering into the comparisons in 1893 included 4,397 establishments, as against 1,027 included in the first volume of the series. The whole number of returns received in 1893 included 4,570 establishments ; this number is larger than the number entering into the comparisons with those received in 1892, inasmuch as only such returns can be compared as are derived from the same establishments in each of the years.

The total number of establishments making returns in the Decennial Census of 1885, in the same industries, was 19,072. These, however, included a large number of small establishments in which comparatively few persons were employed. In the following table we present the output in the establishments

making returns in 1893, and also the output in the establishments making returns, in the same industries, in the Decennial Census of 1885 :

INDUSTRIES.	1885		1893	
	Number of Establishments	Value of Goods Made and Work Done	Number of Establishments	Value of Goods Made and Work Done
Agricultural implements, . . . . .	80	\$1,324,597	11	\$1,141,502
Arms and ammunition, . . . . .	40	2,058,879	13	2,199,063
Artisans' tools, . . . . .	140	2,509,107	67	2,650,834
Awnings, sails, tents, etc., . . . . .	14	108,579	40	452,807
Boots and shoes, . . . . .	2,366	114,729,533	754	97,912,853
Boxes (paper and wooden), . . . . .	215	4,332,505	142	4,700,608
Brick, tiles, and sewer pipe, . . . . .	114	1,541,879	50	1,398,685
Brooms, brushes, and mops, . . . . .	72	1,365,373	21	1,424,790
Burial cases, caskets, coffins, etc., . . . . .	113	770,333	6	328,675
Buttons and dress trimmings, . . . . .	16	1,016,153	19	1,326,105
Carpetings, . . . . .	46	6,536,341	11	7,427,385
Carriages and wagons, . . . . .	1,013	7,277,933	137	4,226,974
Cement, kaolin, lime, and plaster, . . . . .	16	239,875	7	250,245
Chemical preparations (compounded), . . . . .	23	1,165,134	10	936,423
Clocks, watches, and jewelry, . . . . .	54	3,372,699	106	5,571,838
Clothing, . . . . .	2,402	32,659,837	142	24,398,876
Cooking, lighting, and heating apparatus, . . . . .	65	3,131,582	37	3,249,477
Cordage and twine, . . . . .	52	5,077,261	27	8,144,201
Corks, bungs, and taps, . . . . .	4	144,000	4	54,762
Cotton goods, . . . . .	165	61,425,097	155	63,903,158
Cotton, woollen, and other textiles, . . . . .	4	2,394,583	3	2,796,118
Crayons, pencils, crucibles, etc., . . . . .	7	104,490	3	38,843
Drugs and medicines, . . . . .	916	4,722,838	23	3,101,935
Dyestuffs, . . . . .	9	789,973	5	553,833
Earthen, plaster, and stone ware, . . . . .	22	433,213	7	324,436
Electrical apparatus and appliances, . . . . .	40	1,397,737	17	4,826,570
Electroplating, . . . . .	35	214,507	11	106,526
Emery and sand paper and cloth, etc., . . . . .	13	566,101	10	645,329
Fancy articles, etc., . . . . .	18	81,981	5	133,816
Fertilizers, . . . . .	17	2,778,987	5	169,891
Fine arts and taxidermy, . . . . .	23	42,124	3	23,496
Fireworks and matches, . . . . .	5	91,210	2	90,270
Flax, hemp, jute, and linen goods, . . . . .	12	2,562,112	7	3,059,759
Food preparations, . . . . .	1,716	80,535,219	308	74,463,637
Furniture, . . . . .	603	12,716,908	129	7,958,427
Glass, . . . . .	20	1,091,949	9	453,994
Glue, isinglass, and starch, . . . . .	29	1,306,331	18	1,284,555
Hair work (animal and human), . . . . .	55	442,063	9	474,300
Hose: rubber, linen, etc., . . . . .	3	790,430	3	786,433
Hosiery and knit goods, . . . . .	60	4,196,522	43	5,723,131
Ink, mucilage, and paste, . . . . .	20	131,626	9	412,973
Ivory, bone, shell, and horn goods, etc., . . . . .	39	1,623,413	10	423,510
Leather, . . . . .	699	28,008,851	197	17,049,309
Liquors and beverages (not spirituous), . . . . .	63	641,216	23	742,636
Liquors: malt, distilled, and fermented, . . . . .	218	7,881,240	54	8,879,216

INDUSTRIES.	1885		1893	
	Number of Establishments	Value of Goods Made and Work Done	Number of Establishments	Value of Goods Made and Work Done
Lumber, . . . . .	466	\$3,627,345	23	\$2,615,900
Machines and machinery, . . . . .	622	20,865,970	348	28,720,323
Metals and metallic goods, . . . . .	2,732	41,332,005	350	23,163,376
Mixed textiles, . . . . .	13	1,323,861	13	1,638,269
Models, lasts, and patterns, . . . . .	51	258,242	46	795,684
Musical instruments and materials, . . . . .	93	6,145,008	56	3,978,102
Oils and illuminating fluids, . . . . .	23	2,294,931	10	971,265
Paints, colors, and crude chemicals, . . . . .	23	763,034	20	1,247,716
Paper and paper goods, . . . . .	148	21,223,626	101	23,176,387
Perfumes, toilet articles, etc., . . . . .	10	409,801	5	252,419
Photographs and photographic materials, . . . . .	241	936,165	17	236,766
Pollishes and dressing, . . . . .	65	1,788,412	30	1,834,405
Printing, publishing, and bookbinding, . . . . .	712	16,552,475	34	4,447,606
Print works, dye works, and bleacheries, . . . . .	96	16,880,843	46	19,213,815
Railroad construction and equipment, . . . . .	15	2,158,224	14	7,255,656
Rubber and elastic goods, . . . . .	41	12,638,741	35	20,969,903
Scientific instruments and appliances, . . . . .	65	1,227,683	15	1,583,069
Shipbuilding, . . . . .	279	2,107,986	61	1,136,792
Silk and silk goods, . . . . .	12	3,501,240	12	3,969,629
Sporting and athletic goods, . . . . .	27	1,079,966	8	512,686
Stone, . . . . .	378	5,503,569	179	4,285,005
Straw and palm leaf goods, . . . . .	47	6,265,287	21	4,755,273
Tallow, candles, soap, and grease, . . . . .	155	3,474,890	62	3,414,700
Tobacco, snuff, and cigars, . . . . .	302	2,813,064	43	3,235,952
Toys and games (children's), . . . . .	15	316,895	8	586,730
Trunks and valises, . . . . .	25	346,720	7	240,018
Whips, lashes, and stocks, . . . . .	60	1,062,401	10	987,538
Wooden goods, . . . . .	534	4,767,726	175	5,597,294
Woollen goods, . . . . .	189	31,748,278	129	28,372,653
Worsted goods, . . . . .	23	11,193,148	21	16,240,880
ALL INDUSTRIES, . . . . .	19,072	\$629,444,927	4,570	\$606,882,976

The 4,570 establishments, in the different industries, returned an aggregate value of goods made and work done in 1893 of \$606,882,976. This product value, returned from these leading establishments in 1893 is 96.42 per cent of the product value returned by the 19,072 establishments in 1885. This, of itself, indicates the representative character of the returns which form the basis of the present report.

In connection with the Industrial Chronology given in this report we append the following table showing the establishments in the various industries which, for some specified cause, were not engaged in manufacturing during 1893, together with the value of goods made and work done by them in 1892:



INDUSTRIES.	Number of Establishments Reporting	Value of Goods Made and Work Done in 1903
Arms and ammunition, . . . . .	2	\$17,742
Artisans' tools, . . . . .	2	53,000
Awnings, sails, tents, etc., . . . . .	2	8,100
Boots and shoes, . . . . .	73	5,239,525
Boxes (paper and wooden), . . . . .	6	41,241
Brick, tiles, and sewer pipe, . . . . .	1	8,000
Brooms, brushes, and mops, . . . . .	1	7,150
Buttons and dress trimmings, . . . . .	1	134,266
Carpetings, . . . . .	3	539,529
Carriages and wagons, . . . . .	5	123,050
Clocks, watches, and jewelry, . . . . .	3	111,340
Clothing, . . . . .	8	862,746
Cordage and twine, . . . . .	3	1,311,641
Cotton goods, . . . . .	6	254,340
Drugs and medicines, . . . . .	2	8,129
Electrical apparatus and appliances, . . . . .	2	187,120
Emery and sand paper and cloth, etc., . . . . .	2	80,159
Fancy articles, etc., . . . . .	1	900
Fireworks and matches, . . . . .	1	5,000
Flax, hemp, jute, and linen goods, . . . . .	1	26,278
Food preparations, . . . . .	16	193,325
Furniture, . . . . .	15	402,235
Glass, . . . . .	1	12,400
Glue, isinglass, and starch, . . . . .	1	510
Hair work (animal and human), . . . . .	1	3,500
Hosiery and knit goods, . . . . .	2	14,935
Ivory, bone, shell, and horn goods, etc., . . . . .	1	10,255
Leather, . . . . .	9	1,046,116
Liquors: malt, distilled, and fermented, . . . . .	1	7,998
Lumber, . . . . .	3	27,700
Machines and machinery, . . . . .	11	169,683
Metals and metallic goods, . . . . .	16	516,375
Mixed textiles, . . . . .	1	314,735
Models, lasts, and patterns, . . . . .	1	26,800
Musical instruments and materials, . . . . .	1	25,000
Paints, colors, and crude chemicals, . . . . .	2	191,636
Paper and paper goods, . . . . .	2	114,430
Photographs and photographic materials, . . . . .	1	42,527
Printing, publishing, and bookbinding, . . . . .	2	22,907
Saddlery and harness, . . . . .	2	69,700
Scientific instruments and appliances, . . . . .	5	220,842
Shipbuilding, . . . . .	7	301,576
Sporting and athletic goods, . . . . .	1	8,498
Stone, . . . . .	10	212,795
Tallow, candles, soap, and grease, . . . . .	1	27,500
Tobacco, snuff, and cigars, . . . . .	2	62,941
Toys and games (children's), . . . . .	1	31,250
Wooden goods, . . . . .	10	375,504
Woollen goods, . . . . .	18	1,596,174
Worsted goods, . . . . .	2	396,317
TOTALS, . . . . .	271	\$15,445,001

The establishments included in the preceding table, 271 in number, reported a product of \$15,445,001 in 1892, and, owing to certain causes, which are enumerated in the following table, were not engaged in manufacturing during the year 1893:

CLASSIFICATION OF CAUSES.	Number of Establishments Reporting	Value of Goods Made and Work Done in 1892
Insolvent, . . . . .	51	\$5,139,111
Shut down entire year on account of legal troubles, . .	3	93,619
Closed out owing to competition, . . . . .	2	50,188
Gave up manufacturing; buying and selling only, . . .	36	1,458,182
Removed from Massachusetts, . . . . .	14	279,503
Shut down and moved away on account of labor troubles, .	1	250,000
Dissolved partnership, . . . . .	5	86,059
Out of business; no successor, . . . . .	54	3,762,683
Shut down entire year owing to business uncertainty, . .	38	682,189
Shut down entire year on account of ill-health, . . . .	7	104,946
Destroyed by fire, . . . . .	20	866,154
Sold out plant and business, . . . . .	25	2,183,371
Deceased, . . . . .	15	488,996
TOTALS, . . . . .	271	\$15,445,001

It is seen from the above table that 51 establishments turning out a product value of \$5,139,111, in 1892, were unable to make return in 1893 owing to the fact that they were insolvent; 36 gave up manufacturing and confined their efforts to buying and selling because, as they reported, it was impossible to manufacture under existing conditions. Fourteen establishments removed from the State and one closed up and moved away owing to labor troubles. Fifty-four retired from business permanently, having no successors; five dissolved partnership, two closed out owing to competition, three shut down owing to litigation, and 25 sold out plant and business. It is also seen that 38 establishments shut down the entire year owing to business uncertainty; seven on account of ill health, 15 owing to the death of the proprietors, and 20 by being burned out.

In the Report on the Statistics of Manufactures for 1892 a series of tables was presented, derived from Bulletins of the United States Census Office, showing the industrial statistics of 19 leading cities in the Commonwealth according to the National Census of 1890, and also showing from the same

census the condition of the following industries in this State: Cotton; Wool; Silk; Dyeing and Finishing Textiles; Iron; Steel; Mines and Mining; and the use of Distilled Spirits. Reports of the Census of 1890 subsequently published enable the presentation of aggregates for the State respecting the

	CLASSIFICATION OF MANUFACTURING AND MECHANICAL INDUSTRIES.	Number of Establishments Reporting
1	Agricultural implements, . . . . .	17
2	Blacksmithing and wheelwrighting, . . . . .	1,379
3	Boots and shoes (custom work and repairing), . . . . .	1,380
4	Boots and shoes (factory product), . . . . .	1,057
5	Bread and other bakery products, . . . . .	703
6	Brick and tile, . . . . .	110
7	Carpentering, . . . . .	2,050
8	Carpets and rugs (other than rag), . . . . .	7
9	Carriages and wagons (including custom work and repairing), . . . . .	430
10	Cars and general shop construction and repairs by steam railroad companies, . . . . .	14
11	Cars: steam railroad (not including operations of railroad companies), . . . . .	3
12	Cheese, butter, and condensed milk (factory product), . . . . .	29
13	Chemicals, . . . . .	38
14	Clothing: men's (custom work and repairing), . . . . .	1,035
15	Clothing: men's (factory product), . . . . .	221
16	Clothing: women's (dressmaking), . . . . .	2,560
17	Clothing: women's (factory product), . . . . .	44
18	Coffee and spice (roasting and grinding), . . . . .	23
19	Confectionery, . . . . .	218
20	Cooperage, . . . . .	81
21	Cordage and twine, . . . . .	32
22	Cotton goods, . . . . .	187
23	Fertilizers, . . . . .	16
24	Flouring and grist mill products, . . . . .	233
25	Foundry and machine shop products, . . . . .	711
26	Furniture (factory product), . . . . .	136
27	Gas (illuminating and heating), . . . . .	72
28	Glass, . . . . .	6
29	Hats and caps (not including wool hats), . . . . .	54
30	Hosiery and knit goods, . . . . .	74
31	Iron and steel, . . . . .	13
32	Iron and steel, nails and spikes (cut and wrought), including wire nails, . . . . .	40
33	Iron work (architectural and ornamental), . . . . .	26
34	Jewelry, . . . . .	106
35	Leather (tanned and curried), . . . . .	133
36	Liquors (distilled), . . . . .	8
37	Liquors (malt), . . . . .	28
38	Lumber and other mill products from logs or bolts, . . . . .	464
39	Lumber: planing mill products (including sashes, doors, and blinds), . . . . .	164
40	Marble and stone work, . . . . .	122
41	Masonry (brick and stone), . . . . .	745
42	Millinery (custom work), . . . . .	658
43	Painting and paper hanging, . . . . .	1,293

number of establishments, capital invested, value of stock used, miscellaneous expenses, value of goods made and work done, average number of persons employed (operatives, clerks, officers, etc.), and total amount paid in wages and salaries in 63 industries as classified in the following table:

Amount of Capital Invested	Value of Stock Used	Miscellaneous Expenses	Value of Goods Made and Work Done	Average Number of Persons Employed (operatives, clerks, officers, etc.)	Total Amount Paid in Wages and Salaries	
\$1,817,750	\$664,235	\$81,876	\$1,470,085	787	\$448,927	1
2,150,508	1,072,349	215,066	4,206,829	3,257	2,088,704	2
393,292	527,820	165,518	1,936,258	2,144	1,067,366	3
44,567,702	63,928,182	5,568,238	116,367,900	69,934	34,949,698	4
2,775,676	5,923,736	548,753	10,755,915	4,479	2,471,186	5
3,014,277	598,587	156,191	2,314,406	3,261	1,090,450	6
9,299,845	16,915,443	1,236,933	34,336,615	17,092	12,088,985	7
8,676,924	4,731,873	367,164	7,275,009	5,144	1,892,072	8
5,495,873	3,163,947	370,769	7,607,369	4,641	2,969,541	9
1,988,676	1,390,705	-	2,712,763	2,289	1,293,228	10
643,331	483,919	29,169	810,583	418	227,072	11
118,781	484,798	10,951	576,742	91	51,754	12
1,572,643	1,009,898	336,506	2,044,623	624	391,823	13
3,018,610	2,979,054	1,106,589	8,501,602	5,872	3,267,873	14
11,214,626	11,865,905	2,521,163	21,242,647	8,196	3,733,499	15
1,006,832	2,088,442	432,512	6,517,041	8,752	3,011,934	16
592,161	924,468	112,078	1,863,517	1,478	653,551	17
1,403,154	3,020,332	107,344	3,568,269	254	174,076	18
1,560,049	3,164,741	278,433	5,291,844	2,413	1,021,957	19
614,857	540,779	83,395	986,458	604	328,021	20
8,168,593	7,688,142	372,447	10,510,530	3,436	1,230,269	21
128,838,837	56,586,283	6,675,285	100,202,882	76,213	26,230,667	22
1,720,605	1,119,951	54,910	1,910,920	381	204,427	23
2,908,303	5,959,480	169,674	6,906,493	770	386,153	24
36,621,187	14,447,803	3,040,866	38,906,680	25,027	15,492,917	25
3,457,794	2,623,947	341,571	6,166,522	3,679	2,266,725	26
26,063,751	1,747,013	848,895	6,208,125	1,423	1,062,382	27
365,061	127,180	35,760	431,437	514	219,427	28
1,052,362	1,385,981	171,595	3,138,226	2,437	962,229	29
4,497,940	2,552,705	315,786	5,082,087	4,675	1,495,260	30
4,337,118	1,979,546	169,045	2,891,687	1,604	788,065	31
2,906,894	1,669,317	184,067	3,144,083	1,748	894,897	32
995,918	797,786	55,244	1,775,188	834	518,073	33
4,276,610	1,803,444	405,526	5,507,415	3,797	2,160,956	34
9,002,929	16,137,829	638,128	21,656,425	5,852	3,343,688	35
608,833	279,662	924,630	1,372,807	55	42,598	36
6,003,344	2,064,079	1,320,173	5,355,438	968	873,239	37
5,002,033	2,682,932	312,654	5,109,998	3,214	1,194,253	38
4,709,515	4,304,391	324,138	8,112,101	3,816	2,471,628	39
1,893,464	954,926	163,698	3,008,871	2,217	1,453,042	40
5,476,824	7,993,115	540,782	17,580,907	10,384	7,287,066	41
1,081,568	1,848,684	331,861	3,700,398	2,276	899,557	42
1,886,949	1,923,091	286,840	7,218,089	6,145	4,100,858	43

CLASSIFICATION OF MANUFACTURING AND MECHANICAL INDUSTRIES.		Number of Establishments Reporting
1	Paints, . . . . .	26
2	Paper, . . . . .	85
3	Patent medicines and compounds, . . . . .	123
4	Paving and paving materials, . . . . .	40
5	Plumbing and gas fitting, . . . . .	603
6	Printing and publishing (book and job), . . . . .	494
7	Printing and publishing (newspapers and periodicals), . . . . .	409
8	Saddlery and harness, . . . . .	418
9	Shipbuilding, . . . . .	147
10	Shirts (factory product), . . . . .	38
11	Silk and silk goods, . . . . .	20
12	Slaughtering and meat packing (wholesale), . . . . .	14
13	Slaughtering, wholesale (not including meat packing), . . . . .	10
14	Soap and candles, . . . . .	76
15	Sugar and molasses (refining), . . . . .	4
16	Timber products (not manufactured at mill), . . . . .	24
17	Tinsmithing, coppersmithing, and sheet iron working, . . . . .	406
18	Tobacco, cigars, and cigarettes, . . . . .	333
19	Woollen goods, . . . . .	165
20	Worsted goods, . . . . .	33
21	TOTALS, . . . . .	20,122

The following series of tables, taken from the United States Census Bulletins, present aggregates respecting capital invested, value of hired property, value of stock used, miscellaneous expenses, value of goods made and work done, average num-

BOSTON.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Number of establishments, . . . . .	7,942	Value of stock used — Con.	
Total amount of capital invested, \$118,198,539		Fuel, . . . . .	\$1,119,538
Land, . . . . .	\$9,381,608	Rent of power and heat, . . . . .	\$335,077
Buildings, . . . . .	\$12,142,689	Mill supplies, . . . . .	\$343,060
Machinery, implements, and tools, . . . . .	\$25,763,722	All other materials, . . . . .	\$6,759,573
Raw materials, . . . . .	\$14,812,088	Miscellaneous expenses, . . . . .	\$21,543,966
Stock in process and finished products on hand, . . . . .	\$22,063,319	Rent paid for tenancy, . . . . .	\$4,167,153
Cash and credit capital, . . . . .	\$34,035,113	Taxes, . . . . .	\$1,968,371
Value of hired property, . . . . .	\$55,800,301	Insurance, . . . . .	\$632,290
Value of stock used, . . . . .	\$105,602,569	Repairs (ordinary) of build- ings and machinery, . . . . .	\$978,507
Principal materials, . . . . .	\$97,144,746	Amount paid to contractors, . . . . .	\$2,743,926
		Interest paid on cash used in the business, . . . . .	\$397,475

Amount of Capital Invested	Value of Stock Used	Miscellaneous Expenses	Value of Goods Made and Work Done	Average Num- ber of Per- sons Employed (operatives, clerks, officers, etc.)	Total Amount Paid in Wages and Salaries	
\$1,012,336	\$821,277	\$102,111	\$1,346,776	353	\$209,213	1
22,467,036	12,210,458	1,832,753	21,524,173	8,111	3,906,641	2
1,615,478	1,430,193	1,431,463	4,178,915	1,027	539,917	3
294,541	262,834	33,887	681,223	549	267,873	4
2,714,334	3,759,369	234,570	8,114,541	4,532	3,017,097	5
4,674,622	1,936,758	1,020,004	6,899,236	4,233	2,477,967	6
7,531,827	2,902,340	3,070,184	12,019,706	5,996	4,144,307	7
888,379	740,189	115,234	1,900,971	1,284	753,423	8
1,239,998	890,405	71,604	2,248,647	1,183	865,923	9
1,138,458	1,308,001	135,572	2,423,816	2,227	670,711	10
3,353,296	3,251,893	484,390	5,557,509	3,216	1,296,399	11
6,599,248	13,185,256	470,515	16,692,851	1,626	753,787	12
583,487	3,186,921	26,867	3,523,794	266	209,428	13
1,564,595	2,089,755	236,202	3,032,984	833	445,985	14
1,862,275	12,842,736	3,758,036	16,875,538	245	182,085	15
133,827	36,186	8,437	101,609	161	35,059	16
2,127,417	1,530,176	227,086	3,884,772	2,397	1,472,830	17
1,786,599	1,822,641	437,851	4,165,900	2,835	1,467,486	18
34,911,187	21,815,199	2,618,078	35,771,161	19,813	7,586,575	19
21,204,909	14,259,116	1,491,042	21,933,775	12,021	4,556,997	20
\$481,664,838	\$364,438,747	\$49,218,124	\$679,182,171	376,108	\$183,564,800	21

ber of persons employed (operatives, clerks, officers, etc.), and total amount paid in wages and salaries for 20 of the leading cities of Massachusetts with an aggregate for the State.

BOSTON — Continued.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Miscellaneous expenses — Con.		Persons employed — Con.	
All sundries not elsewhere reported, . . . . .	\$10,156,259	Piece hands, . . . . .	12,919
Value of goods made and work done, . . . . .	\$210,936,616	Males above 16 years, . . . . .	5,569
Principal products, . . . . .	\$191,528,401	Females above 15 years, . . . . .	7,334
All other products including work done, . . . . .	\$19,408,215	Children, . . . . .	16
Persons employed, . . . . .	78,476	Officers, firm members, and clerks, . . . . .	12,329
Operatives (skilled and un- skilled), . . . . .	65,557	Males above 16 years, . . . . .	10,596
Males above 16 years, . . . . .	51,684	Females above 15 years, . . . . .	1,733
Females above 15 years, . . . . .	13,558	Wages paid, . . . . .	\$43,908,437
Children, . . . . .	815	Operatives (skilled and un- skilled), . . . . .	\$38,217,716
		Males above 16 years, . . . . .	\$33,791,197
		Females above 15 years, . . . . .	\$4,374,382
		Children, . . . . .	\$52,137

## BOSTON — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Wages paid — Con.		Salaries paid :	
Piece hands, . . . . .	\$5,090,721	Officers, firm members, and	
Males above 16 years, . . . . .	\$3,473,687	clerks, . . . . .	\$11,217,435
Females above 15 years, . . . . .	\$2,213,806	Males above 16 years, . . . . .	\$10,372,179
Children, . . . . .	\$3,228	Females above 15 years, . . . . .	\$845,256

## BROCKTON.

Number of establishments, . . . . .	537	Value of goods made and work done — Con.	
Total amount of capital invested, . . . . .	\$7,772,452	All other products including work done, . . . . .	\$626,100
Land, . . . . .	\$366,175	Persons employed, . . . . .	10,317
Buildings, . . . . .	\$546,497	Operatives (skilled and unskilled), . . . . .	5,112
Machinery, implements, and tools, . . . . .	\$1,204,676	Males above 16 years, . . . . .	4,146
Raw materials, . . . . .	\$1,105,545	Females above 15 years, . . . . .	891
Stock in process and finished products on hand, . . . . .	\$1,016,498	Children, . . . . .	75
Cash and credit capital, . . . . .	\$3,533,061	Piece hands, . . . . .	5,205
Value of hired property, . . . . .	\$1,571,421	Males above 16 years, . . . . .	3,708
Value of stock used, . . . . .	\$11,211,411	Females above 15 years, . . . . .	1,486
Principal materials, . . . . .	\$10,014,612	Children, . . . . .	11
Fuel, . . . . .	\$53,112	Officers, firm members, and clerks, . . . . .	875
Rent of power and heat, . . . . .	\$21,798	Males above 16 years, . . . . .	747
Mill supplies, . . . . .	\$2,410	Females above 15 years, . . . . .	123
All other materials, . . . . .	\$1,119,479	Wages paid, . . . . .	\$5,746,324
Miscellaneous expenses, . . . . .	\$1,136,445	Operatives (skilled and unskilled), . . . . .	\$2,992,808
Rent for tenancy, . . . . .	\$116,290	Males above 16 years, . . . . .	\$2,599,969
Taxes, . . . . .	\$34,450	Females above 15 years, . . . . .	\$379,646
Insurance, . . . . .	\$43,525	Children, . . . . .	\$13,193
Repairs (ordinary) of buildings and machinery, . . . . .	\$80,366	Piece hands, . . . . .	\$2,753,516
Amount paid to contractors, . . . . .	\$14,912	Males above 16 years, . . . . .	\$2,152,611
Interest paid on cash used in the business, . . . . .	\$75,809	Females above 15 years, . . . . .	\$599,233
All sundries not elsewhere reported, . . . . .	\$771,593	Children, . . . . .	\$1,672
Value of goods made and work done, . . . . .	\$21,070,099	Salaries paid :	
Principal products, . . . . .	\$20,443,999	Officers, firm members, and clerks, . . . . .	\$853,841
		Males above 16 years, . . . . .	\$784,703
		Females above 15 years, . . . . .	\$69,133

## CAMBRIDGE.

Number of establishments, . . . . .	1,232	Total amount of capital invested, — Con.	
Total amount of capital invested, . . . . .	\$20,331,585	Raw materials, . . . . .	\$2,171,053
Land, . . . . .	\$1,614,494	Stock in process and finished products on hand, . . . . .	\$4,797,973
Buildings, . . . . .	\$2,346,951	Cash and credit capital, . . . . .	\$6,090,137
Machinery, implements, and tools, . . . . .	\$3,310,972		

## CAMBRIDGE — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Value of hired property, . . .	\$3,936,373	Persons employed — Con.	
Value of stock used, . . .	\$20,268,534	Operatives (skilled and un- skilled) — Con.	
Principal materials, . . .	\$19,117,961	Females above 15 years, . . .	1,299
Fuel, . . . . .	\$367,104	Children, . . . . .	32
Rent of power and heat, . . .	\$22,855	Piece hands, . . . . .	2,560
Mill supplies, . . . . .	\$14,702	Males above 16 years, . . .	1,116
All other materials, . . .	\$746,912	Females above 15 years, . . .	1,442
Miscellaneous expenses, . . .	\$2,370,252	Children, . . . . .	2
Rent for tenancy, . . . . .	\$310,598	Officers, firm members, and clerks, . . .	1,677
Taxes, . . . . .	\$404,041	Males above 16 years, . . .	1,267
Insurance, . . . . .	\$121,383	Females above 15 years, . . .	410
Repairs (ordinary) of build- ings and machinery, . . .	\$117,968	Wages paid, . . . . .	\$6,497,963
Amount paid to contractors, . .	\$62,295	Operatives (skilled and un- skilled), . . . . .	\$5,412,974
Interest paid on cash used in the business, . . . . .	\$200,996	Males above 16 years, . . .	\$5,034,305
All sundries not elsewhere reported, . . . . .	\$1,152,971	Females above 15 years, . . .	\$375,004
Value of goods made and work done, . . . . .	\$35,975,089	Children, . . . . .	\$3,665
Principal products, . . . . .	\$34,299,521	Piece hands, . . . . .	\$1,084,989
All other products including work done, . . . . .	\$1,675,568	Males above 16 years, . . .	\$690,644
Persons employed, . . . . .	12,581	Females above 15 years, . . .	\$393,806
Operatives (skilled and un- skilled), . . . . .	10,021	Children, . . . . .	\$540
Males above 16 years, . . .	8,690	Salaries paid .	
		Officers, firm members, and clerks, . . . . .	\$1,261,850
		Males above 16 years, . . .	\$1,113,157
		Females above 15 years, . . .	\$148,693

## CHELSEA.

Number of establishments, . . .	847	Miscellaneous expenses, . . .	\$547,110
Total amount of capital invested,	\$7,028,856	Rent paid for tenancy, . . .	\$83,035
Land, . . . . .	\$583,253	Taxes, . . . . .	\$53,919
Buildings, . . . . .	\$691,446	Insurance, . . . . .	\$36,834
Machinery, implements, and tools, . . . . .	\$1,570,182	Repairs (ordinary) of build- ings and machinery, . . .	\$74,980
Raw materials, . . . . .	\$934,028	Amount paid to contrac- tors, . . . . .	\$16,000
Stock in process and finished products on hand, . . .	\$1,366,540	Interest paid on cash used in the business, . . . . .	\$141,166
Cash and credit capital, . . .	\$1,882,907	All sundries not elsewhere reported, . . . . .	\$141,176
Value of hired property, . . .	\$1,048,968	Value of goods made and work done, . . . . .	\$8,158,207
Value of stock used, . . . . .	\$4,681,291	Principal products, . . . . .	\$7,227,246
Principal materials, . . . . .	\$4,044,919	All other products including work done, . . . . .	\$930,961
Fuel, . . . . .	\$90,657		
Rent of power and heat, . . .	\$3,411		
Mill supplies, . . . . .	\$37,697		
All other materials, . . . . .	\$504,607		



## CHELSEA — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Persons employed, . . . .	2,977	Wages paid, . . . . .	\$1,384,945
Operatives (skilled and un- skilled), . . . . .	2,258	Operatives (skilled and un- skilled), . . . . .	\$1,116,752
Males above 16 years, . .	1,763	Males above 16 years, . .	\$985,527
Females above 15 years, .	483	Females above 15 years, .	\$129,309
Children, . . . . .	12	Children, . . . . .	\$1,916
Piece hands, . . . . .	719	Piece hands, . . . . .	\$268,193
Males above 16 years, . .	319	Males above 16 years, . .	\$145,202
Females above 15 years, .	396	Females above 15 years, .	\$121,991
Children, . . . . .	4	Children, . . . . .	\$1,000
Officers, firm members, and clerks, . . . . .	493	Salaries paid : Officers, firm members, and clerks, . . . . .	\$499,057
Males above 16 years, . .	403	Males above 16 years, . .	\$443,073
Females above 15 years, .	90	Females above 15 years, .	\$55,984

## FALL RIVER.

Number of establishments, .	397	Value of goods made and work done, . . . . .	\$32,519,281
Total amount of capital invested, Land, . . . . .	\$37,199,470 \$2,454,242	Principal products, . . . .	\$31,801,769
Buildings, . . . . .	\$7,584,841	All other products including work done, . . . . .	\$717,512
Machinery, implements, and tools, . . . . .	\$17,183,915	Persons employed, . . . . .	22,937
Raw materials, . . . . .	\$2,856,327	Operatives (skilled and un- skilled), . . . . .	22,406
Stock in process and finished products on hand, . . .	\$3,131,548	Males above 16 years, . .	12,018
Cash and credit capital, . .	\$3,983,597	Females above 15 years, .	9,171
Value of hired property, . .	\$1,156,755	Children, . . . . .	1,217
Value of stock used, . . . .	\$17,685,671	Piece hands, . . . . .	581
Principal materials, . . . .	\$16,228,888	Males above 16 years, . .	183
Fuel, . . . . .	\$682,099	Females above 15 years, .	389
Rent of power and heat, . .	\$3,245	Children, . . . . .	9
Mill supplies, . . . . .	\$404,252	Officers, firm members, and clerks, . . . . .	555
All other materials, . . . .	\$367,187	Males above 16 years, . .	486
Miscellaneous expenses, . .	\$2,063,945	Females above 15 years, .	69
Rent for tenancy, . . . . .	\$88,231	Wages paid, . . . . .	\$8,213,045
Taxes, . . . . .	\$476,325	Operatives (skilled and un- skilled), . . . . .	\$8,063,866
Insurance, . . . . .	\$106,638	Males above 16 years, . .	\$5,026,810
Repairs (ordinary) of build- ings and machinery, . . .	\$482,477	Females above 15 years, .	\$2,833,265
Interest paid on cash used in the business, . . . . .	\$359,502	Children, . . . . .	\$202,771
All sundries not elsewhere reported, . . . . .	\$550,772		

## FALL RIVER — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Wages paid — Con.		Salaries paid :	
Piece hands, . . . .	\$150,179	Officers, firm members, and	
Males above 16 years, .	\$56,872	clerks, . . . .	\$562,677
Females above 15 years, .	\$92,230	Males above 16 years, .	\$534,076
Children, . . . .	\$1,068	Females above 15 years, .	\$28,601

## FITCHBURG.

Number of establishments, . .	323	Value of goods made and work done, . . . .	\$11,225,036
Total amount of capital invested, .	\$7,563,522	Principal products, . .	\$10,145,534
Land, . . . .	\$582,467	All other products including work done, . . . .	\$1,079,502
Buildings, . . . .	\$959,272	Persons employed, . . . .	5,079
Machinery, implements, and tools, . . . .	\$2,168,058	Operatives (skilled and unskilled), . . . .	4,691
Raw materials, . . . .	\$938,925	Males above 16 years, .	3,310
Stock in process and finished products on hand, . .	\$1,388,126	Females above 15 years, .	1,177
Cash and credit capital, . .	\$1,526,674	Children, . . . .	204
Value of hired property, . .	\$683,045	Piece hands, . . . .	388
Value of stock used, . . . .	\$6,414,105	Males above 16 years, .	298
Principal materials, . . . .	\$5,950,947	Females above 15 years, .	90
Fuel, . . . .	\$183,151	Officers, firm members, and clerks, .	418
Rent of power and heat, . .	\$6,745	Males above 16 years, . .	356
Mill supplies, . . . .	\$77,506	Females above 15 years, . .	62
All other materials, . . . .	\$195,756	Wages paid, . . . .	\$2,396,811
Miscellaneous expenses, . . .	\$746,602	Operatives (skilled and unskilled), . . . .	\$2,156,239
Rent for tenancy, . . . .	\$57,993	Males above 16 years, . .	\$1,760,817
Taxes, . . . .	\$63,501	Females above 15 years, . .	\$359,702
Insurance, . . . .	\$29,442	Children, . . . .	\$35,720
Repairs (ordinary) of buildings and machinery, . .	\$146,967	Piece hands, . . . .	\$240,572
Amount paid to contractors, .	\$16,910	Males above 16 years, . .	\$206,817
Interest paid on cash used in the business, . . . .	\$148,961	Females above 15 years, . .	\$33,755
All sundries not elsewhere reported, . . . .	\$282,828	Salaries paid :	
		Officers, firm members, and	
		clerks, . . . .	\$382,733
		Males above 16 years, . .	\$354,970
		Females above 15 years, . .	\$27,763

## GLOUCESTER.

Number of establishments, . .	206	Total amount of capital invested — Con.	
Total amount of capital invested, .	\$2,763,284	Machinery, implements, and tools, . . . .	\$455,485
Land, . . . .	\$180,773	Raw materials, . . . .	\$460,827
Buildings, . . . .	\$290,909		

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## GLOUCESTER — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Total amount of capital invested — Con.		Persons employed, . . . .	1,563
Stock in process and finished products on hand, . . . .	\$300,965	Operatives (skilled and un- skilled), . . . .	1,089
Cash and credit capital, . . . .	\$1,074,325	Males above 16 years, . . . .	867
Value of hired property, . . . .	\$449,650	Females above 15 years, . . . .	222
Value of stock used, . . . .	\$3,220,601	Piece hands, . . . .	474
Principal materials, . . . .	\$2,980,530	Males above 16 years, . . . .	292
Fuel, . . . .	\$47,838	Females above 15 years, . . . .	180
Rent of power and heat, . . . .	\$1,455	Children, . . . .	2
Mill supplies, . . . .	\$4,124	Officers, firm members, and clerks, . . . .	156
All other materials, . . . .	\$186,594	Males above 16 years, . . . .	138
Miscellaneous expenses, . . . .	\$156,668	Females above 15 years, . . . .	18
Rent for tenancy, . . . .	\$38,769	Wages paid, . . . .	\$751,581
Taxes, . . . .	\$17,463	Operatives (skilled and un- skilled), . . . .	\$566,288
Insurance, . . . .	\$16,676	Males above 16 years, . . . .	\$513,076
Repairs (ordinary) of build- ings and machinery, . . . .	\$22,657	Females above 15 years, . . . .	\$53,212
Amount paid to contractors, . . . .	\$100	Piece hands, . . . .	\$185,293
Interest paid on cash used in the business, . . . .	\$22,403	Males above 16 years, . . . .	\$127,484
All sundries not elsewhere reported, . . . .	\$38,600	Females above 15 years, . . . .	\$57,289
Value of goods made and work done, . . . .	\$4,851,405	Children, . . . .	\$520
Principal products, . . . .	\$4,570,031	Salaries paid : . . . .	
All other products including work done, . . . .	\$281,374	Officers, firm members, and clerks, . . . .	\$112,965
		Males above 16 years, . . . .	\$106,685
		Females above 15 years, . . . .	\$6,280

## HAVERHILL.

Number of establishments, . . . .	734	Value of stock used — Con.	
Total amount of capital invested, . . . .	\$8,084,272	Rent of power and heat, . . . .	\$55,141
Land, . . . .	\$149,750	Mill supplies, . . . .	\$2,653
Buildings, . . . .	\$188,584	All other materials, . . . .	\$804,542
Machinery, implements, and tools, . . . .	\$1,261,060	Miscellaneous expenses, . . . .	\$1,777,142
Raw materials, . . . .	\$1,413,158	Rent for tenancy, . . . .	\$233,078
Stock in process and finished products on hand, . . . .	\$1,555,810	Taxes, . . . .	\$36,614
Cash and credit capital, . . . .	\$3,515,910	Insurance, . . . .	\$57,775
Value of hired property, . . . .	\$3,220,880	Repairs (ordinary) of build- ings and machinery, . . . .	\$39,972
Value of stock used, . . . .	\$13,635,969	Amount paid to contractors, . . . .	\$1,063,885
Principal materials, . . . .	\$12,720,819	Interest paid on cash used in the business, . . . .	\$51,466
Fuel, . . . .	\$52,814	All sundries not elsewhere reported, . . . .	\$294,352

## HAVERHILL — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Value of goods made and work done, . . . .	\$25,304,530	Officers, firm members, and clerks — Con.	
Principal products, . . . .	\$24,324,195	Males above 16 years, . . . .	852
All other products including work done, . . . .	\$1,070,335	Females above 15 years, . . . .	211
Persons employed, . . . .	14,138	Wages paid, . . . . .	\$6,097,574
Operatives (skilled and unskilled), . . . .	4,457	Operatives (skilled and unskilled), . . . . .	\$2,418,798
Males above 16 years, . . . .	3,554	Males above 16 years, . . . .	\$2,154,457
Females above 15 years, . . . .	883	Females above 15 years, . . . .	\$260,296
Children, . . . . .	15	Children, . . . . .	\$4,045
Piece hands, . . . . .	9,681	Piece hands, . . . . .	\$3,678,776
Males above 16 years, . . . .	6,731	Males above 16 years, . . . .	\$2,509,528
Females above 15 years, . . . .	2,740	Females above 15 years, . . . .	\$1,024,248
Children, . . . . .	210	Children, . . . . .	\$145,000
Officers, firm members, and clerks, . . . . .	1,063	Salaries paid :	
		Officers, firm members, and clerks, . . . . .	\$835,056
		Males above 16 years, . . . .	\$735,340
		Females above 15 years, . . . .	\$99,716

## HOLYOKE.

Number of establishments, . . . .	493	Miscellaneous expenses — Con.	
Total amount of capital invested, . . . .	\$24,411,939	Amount paid to contractors, . . . .	\$81,250
Land, . . . . .	\$1,997,659	Interest paid on cash used in the business, . . . . .	\$354,582
Buildings, . . . . .	\$4,200,975	All sundries not elsewhere reported, . . . . .	\$450,304
Machinery, implements, and tools, . . . . .	\$5,782,337	Value of goods made and work done, . . . . .	\$28,060,315
Raw materials, . . . . .	\$2,897,481	Principal products, . . . . .	\$24,415,035
Stock in process and finished products on hand, . . . .	\$3,171,279	All other products including work done, . . . . .	\$1,645,280
Cash and credit capital, . . . .	\$6,362,208	Persons employed, . . . . .	12,305
Value of hired property, . . . .	\$1,445,172	Operatives (skilled and unskilled), . . . . .	10,690
Value of stock used, . . . . .	\$13,574,788	Males above 16 years, . . . .	6,659
Principal materials, . . . .	\$12,111,709	Females above 15 years, . . . .	3,588
Fuel, . . . . .	\$346,467	Children, . . . . .	443
Rent of power and heat, . . . .	\$109,837	Piece hands, . . . . .	1,615
Mill supplies, . . . . .	\$147,766	Males above 16 years, . . . .	181
All other materials, . . . .	\$358,959	Females above 15 years, . . . .	1,425
Miscellaneous expenses, . . . .	\$1,683,226	Children, . . . . .	9
Rent for tenancy, . . . .	\$138,661	Officers, firm members, and clerks, . . . .	834
Taxes, . . . . .	\$177,701	Males above 16 years, . . . .	741
Insurance, . . . . .	\$102,445	Females above 15 years, . . . .	93
Repairs (ordinary) of buildings and machinery, . . . .	\$378,233		

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CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Wages paid, . . . . .	\$5,824,985	Wages paid — Con.	
Operatives (skilled and un-		Piece hands — Con.	
skilled), . . . . .	\$4,708,623	Females above 15 years, .	\$486,936
Males above 16 years, .	\$3,573,916	Children, . . . . .	\$1,600
Females above 15 years, .	\$1,052,916	Salaries paid: . . . . .	
Children, . . . . .	\$51,791	Officers, firm members, and	
Piece hands, . . . . .	\$616,312	clerks, . . . . .	\$872,993
Males above 16 years, .	\$127,776	Males above 16 years, .	\$832,539
		Females above 15 years, .	\$40,449

**LAWRENCE.**

Number of establishments, . . . . .	583	Value of goods made and work done — Con.	
Total amount of capital invested, . . . . .	\$29,626,806	Principal products, . . . . .	\$21,893,484
Land, . . . . .	\$2,166,464	All other products including work done, . . . . .	\$4,657,241
Buildings, . . . . .	\$4,425,586	Persons employed, . . . . .	15,563
Machinery, implements, and tools, . . . . .	\$7,416,393	Operatives (skilled and un-	
Raw materials, . . . . .	\$4,092,776	skilled), . . . . .	14,490
Stock in process and finished products on hand, . . . . .	\$5,553,326	Males above 16 years, .	8,292
Cash and credit capital, . . . . .	\$5,972,261	Females above 15 years, .	5,717
Value of hired property, . . . . .	\$1,508,786	Children, . . . . .	471
Value of stock used, . . . . .	\$15,145,851	Piece hands, . . . . .	1,083
Principal materials, . . . . .	\$13,507,998	Males above 16 years, .	349
Fuel, . . . . .	\$490,388	Females above 15 years, .	738
Rent of power and heat, . . . . .	\$60,402	Children, . . . . .	1
Mill supplies, . . . . .	\$155,313	Officers, firm members, and clerks, . . . . .	708
All other materials, . . . . .	\$982,750	Males above 16 years, . . . . .	533
Miscellaneous expenses, . . . . .	\$1,958,366	Females above 15 years, . . . . .	176
Rent for tenancy, . . . . .	\$121,575	Wages paid, . . . . .	\$6,092,654
Taxes, . . . . .	\$245,419	Operatives (skilled and un-	
Insurance, . . . . .	\$86,074	skilled), . . . . .	\$5,666,177
Repairs (ordinary) of build-		Males above 16 years, . . . . .	\$3,854,402
ings and machinery, . . . . .	\$448,875	Females above 15 years, . . . . .	\$1,718,045
Amount paid to contractors, . . . . .	\$14,656	Children, . . . . .	\$93,730
Interest paid on cash used in the business, . . . . .	\$511,525	Piece hands, . . . . .	\$425,877
All sundries not elsewhere reported, . . . . .	\$580,242	Males above 16 years, . . . . .	\$168,524
Value of goods made and work done, . . . . .	\$26,550,725	Females above 15 years, . . . . .	\$257,153
		Children, . . . . .	\$200
		Salaries paid: . . . . .	
		Officers, firm members, and clerks, . . . . .	\$631,329
		Males above 16 years, . . . . .	\$552,003
		Females above 15 years, . . . . .	\$79,326

## LOWELL.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Number of establishments, . . .	853	Value of goods made and work done — Con.	
Total amount of capital invested,	\$41,911,708	Principal products, . . .	\$36,979,948
Land, . . . . .	\$4,870,589	All other products including work done, . . . . .	\$5,470,561
Buildings, . . . . .	\$6,263,721	Persons employed, . . . . .	27,778
Machinery, implements, and tools, . . . . .	\$10,203,107	Operatives (skilled and unskilled), . . . . .	24,093
Raw materials, . . . . .	\$6,402,524	Males above 16 years, . . . . .	13,378
Stock in process and finished products on hand, . . . . .	\$5,519,603	Females above 15 years, . . . . .	10,136
Cash and credit capital, . . . . .	\$9,162,164	Children, . . . . .	579
Value of hired property, . . . . .	\$3,264,712	Piece hands, . . . . .	3,685
Value of stock used, . . . . .	\$23,006,138	Males above 16 years, . . . . .	706
Principal materials, . . . . .	\$19,242,175	Females above 15 years, . . . . .	2,946
Fuel, . . . . .	\$538,869	Children, . . . . .	88
Rent of power and heat, . . . . .	\$46,756	Officers, firm members, and clerks, . . . . .	1,377
Mill supplies, . . . . .	\$638,783	Males above 16 years, . . . . .	1,012
All other materials, . . . . .	\$2,529,555	Females above 15 years, . . . . .	366
Miscellaneous expenses, . . . . .	\$4,150,844	Wages paid, . . . . .	\$10,044,408
Rent for tenancy, . . . . .	\$256,266	Operatives (skilled and unskilled), . . . . .	\$8,888,822
Taxes, . . . . .	\$400,346	Males above 16 years, . . . . .	\$6,031,155
Insurance, . . . . .	\$131,677	Females above 15 years, . . . . .	\$2,762,903
Repairs (ordinary) of buildings and machinery, . . . . .	\$775,508	Children, . . . . .	\$94,764
Amount paid to contractors, . . . . .	\$300	Piece hands, . . . . .	\$1,155,586
Interest paid on cash used in the business, . . . . .	\$490,214	Males above 16 years, . . . . .	\$310,340
All sundries not elsewhere reported, . . . . .	\$2,096,533	Females above 15 years, . . . . .	\$840,967
Value of goods made and work done, . . . . .	\$42,450,509	Children, . . . . .	\$4,279
		Salaries paid:	
		Officers, firm members, and clerks, . . . . .	\$1,198,984
		Males above 16 years, . . . . .	\$1,048,199
		Females above 15 years, . . . . .	\$150,785

## LYNN.

Number of establishments, . . . . .	1,369	Value of hired property, . . . . .	\$5,324,330
Total amount of capital invested,	\$17,919,025	Value of stock used, . . . . .	\$23,089,967
Land, . . . . .	\$492,232	Principal materials, . . . . .	\$20,617,089
Buildings, . . . . .	\$915,458	Fuel, . . . . .	\$142,220
Machinery, implements, and tools, . . . . .	\$3,071,637	Rent of power and heat, . . . . .	\$138,227
Raw materials, . . . . .	\$2,295,068	Mill supplies, . . . . .	\$54,625
Stock in process and finished products on hand, . . . . .	\$3,203,200	All other materials, . . . . .	\$2,087,826
Cash and credit capital, . . . . .	\$7,941,450	Miscellaneous expenses, . . . . .	\$2,045,531
		Rent for tenancy, . . . . .	\$426,713

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## LYNN — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Miscellaneous expenses — Con.		Persons employed — Con.	
Taxes, . . . . .	\$78,604	Piece hands — Con.	
Insurance, . . . . .	\$106,258	Females above 15 years, .	4,403
Repairs (ordinary) of build- ings and machinery, . .	\$116,381	Children, . . . . .	13
Amount paid to contractors,	\$430,874	Officers, firm members, and clerks,	2,134
Interest paid on cash used in the business, . . . . .	\$217,518	Males above 16 years, . .	1,600
All sundries not elsewhere reported, . . . . .	\$670,183	Females above 15 years, .	444
Value of goods made and work done, . . . . .	\$44,223,845	Wages paid, . . . . .	\$11,033,166
Principal products, . . . .	\$38,506,825	Operatives (skilled and un- skilled), . . . . .	\$5,382,813
All other products including work done, . . . . .	\$5,717,020	Males above 16 years, . .	\$4,892,084
Persons employed, . . . . .	20,318	Females above 15 years, .	\$477,161
Operatives (skilled and un- skilled), . . . . .	9,003	Children, . . . . .	\$13,563
Males above 16 years, . .	7,692	Piece hands, . . . . .	\$5,650,353
Females above 15 years, .	1,239	Males above 16 years, . .	\$3,939,257
Children, . . . . .	72	Females above 15 years, .	\$1,706,496
Piece hands, . . . . .	11,315	Children, . . . . .	\$4,000
Males above 16 years, . .	6,899	Salaries paid:	
		Officers, firm members, and clerks, . . . . .	\$1,744,008
		Males above 16 years, . .	\$1,536,563
		Females above 15 years, .	\$207,415

## MALDEN.

Number of establishments, . .	295	Miscellaneous expenses — Con.	
Total amount of capital invested,	\$7,600,124	Repairs (ordinary) of build- ings and machinery, . .	\$40,342
Land, . . . . .	\$310,599	Interest paid on cash used in the business, . . . . .	\$53,158
Buildings, . . . . .	\$744,912	All sundries not elsewhere reported, . . . . .	\$269,635
Machinery, implements, and tools, . . . . .	\$955,643	Value of goods made and work done, . . . . .	\$9,592,501
Raw materials, . . . . .	\$1,109,530	Principal products, . . . .	\$8,525,273
Stock in process and finished products on hand, . . .	\$1,431,118	All other products including work done, . . . . .	\$1,067,228
Cash and credit capital, . .	\$3,048,322	Persons employed, . . . . .	4,418
Value of hired property, . .	\$430,060	Operatives (skilled and un- skilled), . . . . .	2,686
Value of stock used, . . . .	\$5,901,817	Males above 16 years, . .	2,202
Principal materials, . . . .	\$5,127,467	Females above 15 years, .	429
Fuel, . . . . .	\$81,616	Children, . . . . .	55
Rent of power and heat, . .	\$1,713	Piece hands, . . . . .	1,732
Mill supplies, . . . . .	\$9,725	Males above 16 years, . .	506
All other materials, . . . .	\$681,296	Females above 15 years, .	1,226
Miscellaneous expenses, . .	\$498,174		
Rent for tenancy, . . . . .	\$31,456		
Taxes, . . . . .	\$64,172		
Insurance, . . . . .	\$39,391		

## MALDEN — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Officers, firm members, and clerks,	351	Wages paid — Con.	
Males above 16 years, . . .	298	Piece hands, . . . . .	\$768,579
Females above 15 years, . .	53	Males above 16 years, . .	\$250,926
Wages paid, . . . . .	\$2,115,420	Females above 15 years, .	\$517,653
Operatives (skilled and un-		Salaries paid :	
skilled), . . . . .	\$1,346,841	Officers, firm members, and	
Males above 16 years, . .	\$1,225,826	clerks, . . . . .	\$268,757
Females above 15 years, .	\$105,434	Males above 16 years, . .	\$244,732
Children, . . . . .	\$15,581	Females above 15 years, .	\$24,025

## NEW BEDFORD.

Number of establishments, . .	413	Value of goods made and work done — Con.	
Total amount of capital invested,	\$20,132,683	Principal products, . . . .	\$16,541,827
Land, . . . . .	\$908,430	All other products including	
Buildings, . . . . .	\$3,640,285	work done, . . . . .	\$483,952
Machinery, implements, and		Persons employed, . . . . .	10,812
tools, . . . . .	\$7,588,814	Operatives (skilled and un-	
Raw materials, . . . . .	\$2,678,402	skilled), . . . . .	10,154
Stock in process and finished		Males above 16 years, . .	6,298
products on hand, . . . .	\$2,542,660	Females above 15 years, .	3,480
Cash and credit capital, . .	\$2,774,092	Children, . . . . .	376
Value of hired property, . .	\$946,280	Piece hands, . . . . .	658
Value of stock used, . . . .	\$8,581,373	Males above 16 years, . .	468
Principal materials, . . . .	\$7,872,433	Females above 15 years, .	179
Fuel, . . . . .	\$254,638	Children, . . . . .	11
Rent of power and heat, . .	\$17,429	Officers, firm members, and clerks,	610
Mill supplies, . . . . .	\$302,692	Males above 16 years, . . .	542
All other materials, . . . .	\$134,181	Females above 15 years, . .	68
Miscellaneous expenses, . . .	\$980,306	Wages paid, . . . . .	\$4,378,105
Rent for tenancy, . . . . .	\$72,133	Operatives (skilled and un-	
Taxes, . . . . .	\$192,028	skilled), . . . . .	\$4,045,695
Insurance, . . . . .	\$60,221	Males above 16 years, . .	\$2,944,536
Repairs (ordinary) of build-		Females above 15 years, .	\$1,046,063
ings and machinery, . . .	\$80,900	Children, . . . . .	\$55,096
Amount paid to contractors, .	\$100	Piece hands, . . . . .	\$332,410
Interest paid on cash used in		Males above 16 years, . .	\$266,288
the business, . . . . .	\$168,724	Females above 15 years, .	\$64,722
All sundries not elsewhere		Children, . . . . .	\$1,400
reported, . . . . .	\$406,200	Salaries paid :	
Value of goods made and work		Officers, firm members, and	
done, . . . . .	\$17,025,779	clerks, . . . . .	\$606,911
		Males above 16 years, . .	\$576,297
		Females above 15 years, .	\$30,614



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## NEWTON.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Number of establishments, . . .	193	Value of goods made and work done — Con.	
Total amount of capital invested,	\$4,393,807	Principal products, . . . .	\$2,883,824
Land, . . . . .	\$284,125	All other products including work done, . . . . .	\$1,446,940
Buildings, . . . . .	\$543,539		
Machinery, implements, and tools, . . . . .	\$1,037,612	Persons employed, . . . . .	2,390
Raw materials, . . . . .	\$470,560	Operatives (skilled and unskilled), . . . . .	2,264
Stock in process and finished products on hand, . . . . .	\$952,240	Males above 16 years, . . . . .	1,659
Cash and credit capital, . . . . .	\$1,105,731	Females above 15 years, . . . . .	544
		Children, . . . . .	61
Value of hired property, . . . . .	\$314,075	Piece hands, . . . . .	126
		Males above 16 years, . . . . .	27
Value of stock used, . . . . .	\$2,175,249	Females above 15 years, . . . . .	99
Principal materials, . . . . .	\$1,946,829	Officers, firm members, and clerks, . . . . .	234
Fuel, . . . . .	\$58,137	Males above 16 years, . . . . .	189
Rent of power and heat, . . . . .	\$150	Females above 15 years, . . . . .	45
Mill supplies, . . . . .	\$13,068		
All other materials, . . . . .	\$157,065	Wages paid, . . . . .	\$1,168,910
Miscellaneous expenses, . . . . .	\$243,663	Operatives (skilled and unskilled), . . . . .	\$1,121,686
Rent for tenancy, . . . . .	\$25,173	Males above 16 years, . . . . .	\$959,751
Taxes, . . . . .	\$24,724	Females above 15 years, . . . . .	\$153,932
Insurance, . . . . .	\$21,271	Children, . . . . .	\$8,003
Repairs (ordinary) of buildings and machinery, . . . . .	\$56,423	Piece hands, . . . . .	\$47,224
Interest paid on cash used in the business, . . . . .	\$62,771	Males above 16 years, . . . . .	\$19,500
All sundries not elsewhere reported, . . . . .	\$53,301	Females above 15 years, . . . . .	\$27,724
Value of goods made and work done, . . . . .	\$4,335,764	Salaries paid:	
		Officers, firm members, and clerks, . . . . .	\$239,365
		Males above 16 years, . . . . .	\$213,906
		Females above 15 years, . . . . .	\$25,459

## SALEM.

Number of establishments, . . . . .	513	Value of stock used, . . . . .	\$4,738,643
Total amount of capital invested,	\$6,250,164	Principal materials, . . . . .	\$4,465,450
Land, . . . . .	\$252,087	Fuel, . . . . .	\$85,937
Buildings, . . . . .	\$798,953	Rent of power and heat, . . . . .	\$34,585
Machinery, implements, and tools, . . . . .	\$2,056,464	Mill supplies, . . . . .	\$69,660
Raw materials, . . . . .	\$878,493	All other materials, . . . . .	\$83,011
Stock in process and finished products on hand, . . . . .	\$747,770	Miscellaneous expenses, . . . . .	\$424,772
Cash and credit capital, . . . . .	\$1,516,397	Rent for tenancy, . . . . .	\$72,929
Value of hired property, . . . . .	\$752,613	Taxes, . . . . .	\$52,942
		Insurance, . . . . .	\$32,363
		Repairs (ordinary) of buildings and machinery, . . . . .	\$92,031

## SALEM — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Miscellaneous expenses — Con.		Officers, firm members, and clerks,	671
Amount paid to contractors, .	\$11,940	Males above 16 years, . .	575
Interest paid on cash used in the business, . . . .	\$74,916	Females above 15 years, . .	96
All sundries not elsewhere reported, . . . .	\$87,651	Wages paid, . . . .	\$1,973,966
Value of goods made and work done, . . . .	\$8,522,751	Operatives (skilled and un- skilled), . . . .	\$1,446,108
Principal products, . . .	\$8,272,398	Males above 16 years, . .	\$1,210,442
All other products including work done, . . . .	\$250,353	Females above 15 years, . .	\$233,397
Persons employed, . . . .	5,127	Children, . . . .	\$2,269
Operatives (skilled and un- skilled), . . . .	3,519	Piece hands, . . . .	\$527,858
Males above 16 years, . .	2,578	Males above 16 years, . .	\$304,679
Females above 15 years, . .	923	Females above 15 years, . .	\$212,079
Children, . . . .	18	Children, . . . .	\$11,100
Piece hands, . . . .	1,608	Salaries paid :	
Males above 16 years, . .	700	Officers, firm members, and clerks, . . . .	\$472,110
Females above 15 years, . .	812	Males above 16 years, . .	\$436,065
Children, . . . .	96	Females above 15 years, . .	\$36,045

## SOMERVILLE.

Number of establishments, . .	404	Miscellaneous expenses — Con.	
Total amount of capital invested,	\$3,893,859	Repairs (ordinary) of build- ings and machinery, . .	\$37,047
Land, . . . .	\$598,040	Amount paid to contractors, .	\$72
Buildings, . . . .	\$683,575	Interest paid on cash used in the business, . . . .	\$26,164
Machinery, implements, and tools, . . . .	\$601,909	All sundries not elsewhere reported, . . . .	\$103,302
Raw materials, . . . .	\$389,729	Value of goods made and work done, . . . .	\$7,307,522
Stock in process and finished products on hand, . .	\$772,555	Principal products, . . . .	\$5,202,185
Cash and credit capital, . .	\$838,051	All other products including work done, . . . .	\$2,105,337
Value of hired property, . .	\$592,590	Persons employed, . . . .	2,789
Value of stock used, . . . .	\$4,420,128	Operatives (skilled and un- skilled), . . . .	2,559
Principal materials, . . . .	\$4,218,248	Males above 16 years, . .	2,233
Fuel, . . . .	\$80,947	Females above 15 years, . .	320
Rent of power and heat, . .	\$785	Children, . . . .	6
Mill supplies, . . . .	\$4,275	Piece hands, . . . .	230
All other materials, . . . .	\$115,873	Males above 16 years, . .	127
Miscellaneous expenses, . .	\$439,673	Females above 15 years, . .	98
Rent for tenancy, . . . .	\$54,584	Children, . . . .	5
Taxes, . . . .	\$194,154		
Insurance, . . . .	\$24,350		

## SOMERVILLE — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Officers, firm members, and clerks, . . . . .	496	Wages paid — Con.	
Males above 16 years, . . . . .	405	Piece hands, . . . . .	\$93,655
Females above 15 years, . . . . .	91	Males above 16 years, . . . . .	\$70,310
Wages paid, . . . . .	\$1,357,037	Females above 15 years, . . . . .	\$22,868
Operatives (skilled and un-		Children, . . . . .	\$477
skilled), . . . . .	\$1,263,382	Salaries paid:	
Males above 16 years, . . . . .	\$1,180,236	Officers, firm members, and	
Females above 15 years, . . . . .	\$81,897	clerks, . . . . .	\$426,942
Children, . . . . .	\$1,249	Males above 16 years, . . . . .	\$382,111
		Females above 15 years, . . . . .	\$44,831

## SPRINGFIELD.

Number of establishments, . . . . .	692	Value of goods made and work done — Con.	
Total amount of capital invested, . . . . .	\$13,199,283	Principal products, . . . . .	\$16,241,159
Land, . . . . .	\$1,266,006	All other products including work done, . . . . .	\$799,533
Buildings, . . . . .	\$2,078,698	Persons employed, . . . . .	9,159
Machinery, implements, and tools, . . . . .	\$4,055,647	Operatives (skilled and un-	
Raw materials, . . . . .	\$1,308,956	skilled), . . . . .	7,399
Stock in process and finished products on hand, . . . . .	\$1,760,031	Males above 16 years, . . . . .	6,073
Cash and credit capital, . . . . .	\$2,729,945	Females above 15 years, . . . . .	1,256
Value of hired property, . . . . .	\$3,019,598	Children, . . . . .	70
Value of stock used, . . . . .	\$7,817,534	Piece hands, . . . . .	1,760
Principal materials, . . . . .	\$7,106,078	Males above 16 years, . . . . .	871
Fuel, . . . . .	\$153,470	Females above 15 years, . . . . .	832
Rent of power and heat, . . . . .	\$34,437	Children, . . . . .	7
Mill supplies, . . . . .	\$87,317	Officers, firm members, and clerks, . . . . .	1,091
All other materials, . . . . .	\$436,232	Males above 16 years, . . . . .	871
Miscellaneous expenses, . . . . .	\$875,334	Females above 15 years, . . . . .	220
Rent for tenancy, . . . . .	\$226,271	Wages paid, . . . . .	\$4,843,636
Taxes, . . . . .	\$131,225	Operatives (skilled and un-	
Insurance, . . . . .	\$48,040	skilled), . . . . .	\$4,024,439
Repairs (ordinary) of build-		Males above 16 years, . . . . .	\$3,611,157
ings and machinery, . . . . .	\$70,621	Females above 15 years, . . . . .	\$399,277
Amount paid to contractors, . . . . .	\$16,750	Children, . . . . .	\$14,005
Interest paid on cash used in the business, . . . . .	\$86,629	Piece hands, . . . . .	\$819,197
All sundries not elsewhere reported, . . . . .	\$295,798	Males above 16 years, . . . . .	\$541,566
Value of goods made and work done, . . . . .	\$17,040,692	Females above 15 years, . . . . .	\$276,886
		Children, . . . . .	\$745
		Salaries paid:	
		Officers, firm members, and	
		clerks, . . . . .	\$1,025,258
		Males above 16 years, . . . . .	\$910,328
		Females above 15 years, . . . . .	\$114,930

## TAUNTON.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Number of establishments, . . .	316	Value of goods made and work done — Con.	
Total amount of capital invested,	\$7,891,382	All other products including work done, . . . . .	\$1,002,748
Land, . . . . .	\$484,680		
Buildings, . . . . .	\$1,163,105	Persons employed, . . . . .	6,148
Machinery, implements, and tools, . . . . .	\$1,979,646	Operatives (skilled and unskilled), . . . . .	5,533
Raw materials, . . . . .	\$778,033	Males above 16 years, . . . . .	4,171
Stock in process and finished products on hand, . . . . .	\$1,762,255	Females above 15 years, . . . . .	1,298
Cash and credit capital, . . . . .	\$1,723,663	Children, . . . . .	64
Value of hired property, . . . . .	\$656,880	Piece hands, . . . . .	615
Value of stock used, . . . . .	\$4,799,287	Males above 16 years, . . . . .	432
Principal materials, . . . . .	\$4,145,292	Females above 15 years, . . . . .	183
Fuel, . . . . .	\$187,026	Officers, firm members, and clerks, . . . . .	818
Rent of power and heat, . . . . .	\$2,252	Males above 16 years, . . . . .	293
Mill supplies, . . . . .	\$44,050	Females above 15 years, . . . . .	25
All other materials, . . . . .	\$420,667		
Miscellaneous expenses, . . . . .	\$707,629	Wages paid, . . . . .	\$2,837,194
Rent for tenancy, . . . . .	\$42,272	Operatives (skilled and unskilled), . . . . .	\$2,540,196
Taxes, . . . . .	\$67,357	Males above 16 years, . . . . .	\$2,136,774
Insurance, . . . . .	\$33,525	Females above 15 years, . . . . .	\$392,683
Repairs (ordinary) of buildings and machinery, . . . . .	\$87,903	Children, . . . . .	\$10,739
Amount paid to contractors, . . . . .	\$4,700	Piece hands, . . . . .	\$296,998
Interest paid on cash used in the business, . . . . .	\$117,571	Males above 16 years, . . . . .	\$242,736
All sundries not elsewhere reported, . . . . .	\$354,301	Females above 15 years, . . . . .	\$54,262
Value of goods made and work done, . . . . .	\$9,936,829	Salaries paid:	
Principal products, . . . . .	\$8,934,081	Officers, firm members, and clerks, . . . . .	\$304,079
		Males above 16 years, . . . . .	\$290,365
		Females above 15 years, . . . . .	\$13,714

## WORCESTER.

Number of establishments, . . . . .	996	Value of hired property, . . . . .	\$4,679,140
Total amount of capital invested,	\$25,280,620	Value of stock used, . . . . .	\$21,209,904
Land, . . . . .	\$1,752,855	Principal materials, . . . . .	\$17,693,834
Buildings, . . . . .	\$2,455,949	Fuel, . . . . .	\$738,764
Machinery, implements, and tools, . . . . .	\$5,836,413	Rent of power and heat, . . . . .	\$62,962
Raw materials, . . . . .	\$3,765,212	Mill supplies, . . . . .	\$142,773
Stock in process and finished products on hand, . . . . .	\$4,565,173	All other materials, . . . . .	\$2,570,571
Cash and credit capital, . . . . .	\$6,855,018	Miscellaneous expenses, . . . . .	\$1,827,815
		Rent for tenancy, . . . . .	\$373,361

## xxxviii STATISTICS OF MANUFACTURES. [Pub. Doc.

## WORCESTER — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Miscellaneous expenses — Con.		Persons employed — Con.	
Taxes, . . . . .	\$216,292	Piece hands — Con.	
Insurance, . . . . .	\$147,861	Females above 15 years, .	1,388
Repairs (ordinary) of build- ings and machinery, . .	\$116,943	Children, . . . . .	60
Amount paid to contractors, .	\$1,441	Officers, firm members, and clerks,	1,485
Interest paid on cash used in the business, . . . . .	\$174,420	Males above 16 years, . .	1,355
All sundries not elsewhere reported, . . . . .	\$797,497	Females above 15 years, .	130
Value of goods made and work done, . . . . .	\$39,533,869	Wages paid, . . . . .	\$10,120,414
Principal products, . . . .	\$36,127,933	Operatives (skilled and un- skilled), . . . . .	\$8,802,344
All other products including work done, . . . . .	\$3,405,936	Males above 16 years, . .	\$8,126,010
Persons employed, . . . . .	20,244	Females above 15 years, .	\$649,785
Operatives (skilled and un- skilled), . . . . .	17,118	Children, . . . . .	\$26,549
Males above 16 years, . .	14,705	Piece hands, . . . . .	\$1,318,070
Females above 15 years, .	2,258	Males above 16 years, . .	\$940,634
Children, . . . . .	155	Females above 15 years, .	\$370,262
Piece hands, . . . . .	3,126	Children, . . . . .	\$7,174
Males above 16 years, . .	1,678	Salaries paid :	
		Officers, firm members, and clerks, . . . . .	\$1,573,707
		Males above 16 years, . .	\$1,508,511
		Females above 15 years, .	\$65,196

## THE STATE.

Number of establishments, . .	26,923	Persons employed — Con.	
Total amount of capital invested, \$630,032,341		Operatives (day and piece hands) — Con.	
Land, . . . . .	\$40,926,844	Females above 15 years, .	132,923
Buildings, . . . . .	\$83,906,371	Children, . . . . .	8,577
Machinery, implements, and tools, . . . . .	\$149,948,630	Day hands, . . . . .	347,010
Live assets, . . . . .	\$355,250,496	Males above 16 years, . .	250,571
Value of stock used, . . . .	\$473,199,434	Females above 15 years, .	86,382
Miscellaneous expenses, . .	\$63,083,782	Children, . . . . .	7,757
Value of goods made and work done, . . . . .	\$988,160,403	Piece hands, . . . . .	100,260
Persons employed :		Males above 16 years, . .	54,599
Operatives (day and piece hands), . . . . .	447,270	Females above 15 years, .	44,541
Males above 16 years, . .	305,470	Children, . . . . .	1,120
		Officers, firm members, and clerks,	37,912
		Males above 16 years, . .	32,475
		Females above 15 years, .	5,437
		Wages paid :	
		Operatives (day and piece hands), . . . . .	\$205,844,337
		Males above 16 years, . .	\$163,682,816

THE STATE — Concluded.

CLASSIFICATION.	Eleventh United States Census 1890	CLASSIFICATION.	Eleventh United States Census 1890
Wages paid — Con.		Average yearly earnings :	
Operatives (day and piece hands) — Con.		Operatives (day and piece hands), . . . . .	\$460.22
Females above 15 years, .	\$40,546,206	Males above 16 years, .	\$535.84
Children, . . . . .	\$1,615,315	Females above 15 years, .	\$305.04
Day hands, . . . . .	\$163,259,517	Children, . . . . .	\$181.97
Males above 16 years, .	\$135,516,487	Day hands, . . . . .	\$470.47
Females above 15 years, .	\$26,419,831	Males above 16 years, .	\$540.18
Children, . . . . .	\$1,323,199	Females above 15 years, .	\$298.93
Piece hands, . . . . .	\$42,584,820	Children, . . . . .	\$170.58
Males above 16 years, .	\$28,166,329	Piece hands, . . . . .	\$424.74
Females above 15 years, .	\$14,126,375	Males above 16 years, .	\$515.88
Children, . . . . .	\$292,116	Females above 15 years, .	\$317.15
Salaries paid :		Children, . . . . .	\$260.82
Officers, firm members, and clerks, . . . . .	\$33,826,172	Officers, firm members, and clerks, . . . . .	\$892.23
Males above 16 years, .	\$31,343,429	Males above 16 years, .	\$965.16
Females above 15 years, .	\$2,482,743	Females above 15 years, .	\$456.64

The total value of product for the Census year 1890, according to the returns of the United States Census, as shown by the above table, was \$888,160,403. On page xxiii of the Annual Statistics of Manufactures for 1890, an estimate of the total product was presented, based upon the annual returns made to this office. This estimate, upon one method of computation, reached the sum of \$880,614,364, or by a method of averaging, the sum of \$871,061,163 which was by the Bureau regarded as a fair estimate of the entire output of the productive industry of the Commonwealth for the year 1890. The fact that this estimate so closely approaches the actual amount disclosed by the United States Census indicates the accuracy of our annual returns, and supports the validity of the results shown by them.

I wish again to commend the efficient services of Mr. Frank H. Drown, in charge of the Division of Manufactures in this Bureau, and of the clerical force which, under his immediate direction, has been engaged in the preparation of this volume. The continued co-operation and assistance of Mr. Charles F. Pidgin, Chief Clerk of the Bureau, is also especially acknowledged.

H. G. W.



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# STATISTICS OF MANUFACTURES.

1893.





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**PRIVATE FIRMS AND CORPORATIONS;  
PARTNERS AND STOCKHOLDERS:  
BY INDUSTRIES.**

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# PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

1892.

[There are duplications in the columns devoted to "Number of Private Firms," "Partners," "Number of Corporations," and "Stockholders." These duplications are indicated by an asterisk (\*). They are caused by the fact that the same firm or corporation is often engaged in manufacturing in two or more establishments located in different towns and sometimes in different industries. The plan adopted has been to consider each establishment (whether managed in connection with another or not) as one, and to credit the whole number of firms, partners, corporations, and stockholders to each industry, but to count them once only in making up the total for "All Industries."]

	INDUSTRIES.	Number of Estab- lishments Considered	Number of Private Firms	PARTNERS	
				Males	Females
1	Agricultural implements, . . . . .	11	6	8	-
2	Arms and ammunition, . . . . .	13	8	12	-
3	Artisans' tools, . . . . .	65	54	73	3
4	Awnings, sails, tents, etc., . . . . .	39	89	52	-
5	Boots and shoes, . . . . .	712	*672	*1,070	11
6	Boxes (paper and wooden), . . . . .	136	*123	*180	1
7	Brick, tiles, and sewer pipe, . . . . .	49	40	62	5
8	Brooms, brushes, and mops, . . . . .	21	19	32	2
9	Burial cases, caskets, coffins, etc., . . . . .	6	5	6	-
10	Buttons and dress trimmings, . . . . .	19	12	19	1
11	Carpetings, . . . . .	11	4	4	-
12	Carriages and wagons, . . . . .	132	120	165	-
13	Cement, kaolin, lime, and plaster, . . . . .	7	5	9	-
14	Chemical preparations (compounded), . . . . .	10	6	7	2
15	Clocks, watches, and jewelry, . . . . .	97	92	181	7
16	Clothing, . . . . .	135	114	227	2
17	Cooking, lighting, and heating apparatus, . . . . .	36	20	33	1
18	Cordage and twine, . . . . .	27	14	20	-
19	Corks, bungs, and taps, . . . . .	3	3	4	-
20	Cotton goods, . . . . .	149	34	66	6
21	Cotton, woollen, and other textiles, . . . . .	3	1	3	-
22	Crayons, pencils, crucibles, etc., . . . . .	3	1	2	-
23	Drugs and medicines, . . . . .	23	15	25	1
24	Dyestuffs, . . . . .	5	3	4	1
25	Earthen, plaster, and stone ware, . . . . .	7	6	10	-
26	Electrical apparatus and appliances, . . . . .	15	8	10	-
27	Electroplating, . . . . .	9	9	12	-
28	Emery and sand paper and cloth, etc., . . . . .	10	2	3	-
29	Fancy articles, etc., . . . . .	5	4	7	-
30	Fertilizers, . . . . .	5	5	7	-

PRIVATE FIRMS AND CORPORATIONS;  
PARTNERS AND STOCKHOLDERS:  
BY INDUSTRIES.

1892.

[There are duplications in the columns devoted to "Number of Private Firms," "Partners," "Number of Corporations," and "Stockholders." These duplications are indicated by an asterisk (\*). They are caused by the fact that the same firm or corporation is often engaged in manufacturing in two or more establishments located in different towns and sometimes in different industries. The plan adopted has been to consider each establishment (whether managed in connection with another or not) as one, and to credit the whole number of firms, partners, corporations, and stockholders to each industry, but to count them once only in making up the total for "All Industries."]

PARTNERS			Number of Corpora- tions	STOCKHOLDERS				AGGREGATES: Partners and Stockholders	
Special	Estates	Total		Males	Females	Banks, Trustees, etc.	Total		
-	-	8	5	65	21	1	87	95	1
1	-	13	5	102	26	1	129	142	2
-	-	76	11	356	235	54	645	721	3
-	-	52	-	-	-	-	-	52	4
22	1	*1,104	*40	*321	36	-	*357	*1,461	5
2	-	*183	13	66	44	9	119	*302	6
-	-	67	9	215	68	1	284	351	7
-	-	34	2	23	11	3	37	71	8
-	-	6	1	29	5	5	39	45	9
-	-	20	*7	*65	16	2	*83	*103	10
-	-	4	7	447	359	168	974	978	11
2	-	167	12	207	66	18	291	458	12
-	-	9	2	16	2	1	19	28	13
-	-	9	4	31	7	3	41	50	14
2	-	190	5	136	23	-	164	354	15
1	-	230	21	414	158	21	593	823	16
1	-	35	16	296	65	8	369	404	17
2	-	22	*13	*209	78	9	*296	*318	18
-	-	4	-	-	-	-	-	4	19
-	1	73	*115	*9,837	*6,981	*2,377	*19,195	*19,268	20
-	-	3	*2	*192	*150	*115	*457	*460	21
-	-	2	2	37	13	-	50	52	22
-	-	26	8	89	33	4	126	152	23
-	-	5	2	12	1	-	13	18	24
-	-	10	1	11	3	-	14	24	25
-	-	10	7	<sup>1</sup> 207	38	4	<sup>1</sup> 249	<sup>1</sup> 259	26
-	-	12	-	-	-	-	-	12	27
-	-	3	8	88	15	1	104	107	28
-	-	7	1	4	3	-	7	14	29
-	-	7	-	-	-	-	-	7	30

<sup>1</sup> Includes 1 syndicate.

PRIVATE FIRMS, PARTNERS, ETC.: BY INDUSTRIES—1892  
— Concluded.

	INDUSTRIES.	Number of Estab- lishments Considered	Number of Private Firms	PARTNERS	
				Males	Females
1	Fine arts and taxidermy, . . . . .	3	2	3	-
2	Flax, hemp, jute, and linen goods, . . . . .	7	4	11	-
3	Food preparations, . . . . .	300	265	309	6
4	Furniture, . . . . .	121	*110	*186	5
5	Glass, . . . . .	8	6	7	1
6	Glue, isinglass, and starch, . . . . .	18	14	25	1
7	Hair work (animal and human), . . . . .	9	9	8	1
8	Hose: rubber, linen, etc., . . . . .	3	1	1	-
9	Hosiery and knit goods, . . . . .	42	*27	*48	2
10	Ink, mucilage, and paste, . . . . .	9	9	14	-
11	Ivory, bone, shell, and horn goods, etc., . . . . .	10	10	16	1
12	Leather, . . . . .	148	*134	*225	-
13	Liquors and beverages (not spirituous), . . . . .	23	22	26	1
14	Liquors: malt, distilled, and fermented, . . . . .	53	44	77	6
15	Lumber, . . . . .	21	20	32	1
16	Machines and machinery, . . . . .	336	242	356	10
17	Metals and metallic goods, . . . . .	341	254	374	11
18	Mixed textiles, . . . . .	13	7	8	-
19	Models, lasts, and patterns, . . . . .	46	46	70	1
20	Musical instruments and materials, . . . . .	54	38	61	-
21	Oils and illuminating fluids, . . . . .	10	8	11	1
22	Paints, colors, and crude chemicals, . . . . .	20	16	34	-
23	Paper and paper goods, . . . . .	98	*36	*81	-
24	Perfumes, toilet articles, etc., . . . . .	5	3	3	-
25	Photographs and photographic materials, . . . . .	17	16	19	1
26	Polishes and dressing, . . . . .	29	26	42	3
27	Printing, publishing, and bookbinding, . . . . .	34	*24	*40	1
28	Print works, dye works, and bleacheries, . . . . .	44	30	38	3
29	Railroad construction and equipment, . . . . .	14	2	3	-
30	Rubber and elastic goods, . . . . .	34	*18	*30	1
31	Saddlery and harness, . . . . .	38	36	44	-
32	Scientific instruments and appliances, . . . . .	15	12	21	-
33	Shipbuilding, . . . . .	56	54	75	1
34	Silk and silk goods, . . . . .	12	6	9	1
35	Sporting and athletic goods, . . . . .	7	5	7	-
36	Stone, . . . . .	175	161	250	6
37	Straw and palm leaf goods, . . . . .	20	18	39	1
38	Tallow, candles, soap, and grease, . . . . .	62	59	83	-
39	Tobacco, snuff, and cigars, . . . . .	42	37	53	1
40	Toys and games (children's), . . . . .	8	5	8	2
41	Trunks and valises, . . . . .	7	7	11	-
42	Whips, lashes, and stocks, . . . . .	10	7	14	-
43	Wooden goods, . . . . .	168	154	207	6
44	Woollen goods, . . . . .	125	*88	*139	5
45	Worsted goods, . . . . .	20	10	17	-
46	ALL INDUSTRIES, . . . . .	4,397	3,534	5,477	123

PRIVATE FIRMS, PARTNERS, ETC.: BY INDUSTRIES — 1892  
— Concluded.

PARTNERS			Number of Corpora- tions	STOCKHOLDERS				AGGREGATES: Partners and Stockholders	
Special	Estates	Total		Males	Females	Banks, Trustees, etc.	Total		
-	-	3	1	9	1	1	11	14	1
-	-	11	3	24	23	6	53	69	2
3	-	378	*35	*1483	92	5	*1590	*1958	3
5	1	*197	11	233	109	-	342	*539	4
-	-	3	2	25	1	-	26	34	5
-	1	27	4	33	3	-	33	65	6
-	-	9	-	-	-	-	-	9	7
-	-	1	2	77	12	3	94	95	8
-	-	*50	*15	*585	*355	*228	*1,168	*1,216	9
-	-	14	-	-	-	-	-	14	10
1	-	18	-	-	-	-	-	18	11
5	-	*230	14	100	32	-	192	*422	12
1	-	23	1	24	8	-	32	60	13
-	-	33	*9	*369	8	1	*378	*161	14
-	-	33	1	20	14	3	37	70	15
2	3	371	*93	*2,613	*992	173	*3,778	*4,149	16
1	2	388	37	1,408	545	62	2,015	2,403	17
-	-	8	6	43	5	-	48	56	18
1	-	72	-	-	-	-	-	72	19
-	-	61	16	178	62	1	241	302	20
-	-	12	2	33	21	1	57	69	21
1	-	35	4	46	8	-	54	89	22
-	-	*81	*62	*803	*369	*35	*1,227	*1,306	23
-	-	3	2	7	-	-	7	10	24
-	-	20	1	19	-	-	19	39	25
-	-	45	3	25	5	1	31	76	26
-	-	*41	10	74	17	2	93	*134	27
2	-	43	*14	*613	*463	*452	*1,528	*1,571	28
-	-	3	*12	*31	7	2	*40	*43	29
-	-	*31	16	375	233	61	669	*720	30
-	-	44	2	61	21	-	82	126	31
1	-	22	3	59	4	5	68	90	32
-	-	76	2	22	5	1	28	104	33
-	-	10	6	194	47	2	243	253	34
1	-	8	2	10	-	-	10	18	35
-	-	256	14	290	107	10	407	663	36
-	-	40	2	10	5	-	15	55	37
-	-	83	3	10	1	-	11	94	38
1	1	56	5	40	3	-	43	99	39
-	-	10	3	21	-	-	21	31	40
-	-	11	-	-	-	-	-	11	41
-	-	14	3	100	33	7	140	154	42
-	-	213	14	155	24	11	190	403	43
1	2	*147	*37	*564	*337	162	*1,063	*1,210	44
-	-	17	*10	*298	*122	*45	*465	*482	45
50	12	5,671	820	*21,860	11,653	3,551	*37,064	*42,735	46

<sup>1</sup> Includes 5 syndicates.

<sup>4</sup> Includes 10 railroads.

<sup>2</sup> Includes 1 syndicate.

<sup>5</sup> Includes 3 syndicates and 4 railroads.

<sup>3</sup> Includes 4 syndicates.

# PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

1893.

[There are duplications in the columns devoted to "Number of Private Firms," "Partners," "Number of Corporations," and "Stockholders." These duplications are indicated by an asterisk (\*). They are caused by the fact that the same firm or corporation is often engaged in manufacturing in two or more establishments located in different towns and sometimes in different industries. The plan adopted has been to consider each establishment (whether managed in connection with another or not) as one, and to credit the whole number of firms, partners, corporations, and stockholders to each industry, but to count them once only in making up the total for "All Industries."]

	INDUSTRIES.	Number of Estab- lishments Considered	Number of Private Firms	PARTNERS	
				Males	Females
1	Agricultural implements, . . . . .	11	6	8	-
2	Arms and ammunition, . . . . .	13	8	12	1
3	Artisans' tools, . . . . .	65	54	73	2
4	Awnings, sails, tents, etc., . . . . .	39	39	53	1
5	Boots and shoes, . . . . .	712	*667	*1,052	10
6	Boxes (paper and wooden), . . . . .	136	*121	*175	2
7	Brick, tiles, and sewer pipe, . . . . .	49	40	58	3
8	Brooms, brushes, and mops, . . . . .	21	19	29	2
9	Burial cases, caskets, coffins, etc., . . . . .	6	5	9	-
10	Buttons and dress trimmings, . . . . .	19	11	17	1
11	Carpetings, . . . . .	11	4	5	-
12	Carriages and wagons, . . . . .	132	119	161	-
13	Cement, kaolin, lime, and plaster, . . . . .	7	5	9	-
14	Chemical preparations (compounded), . . . . .	10	6	7	2
15	Clocks, watches, and jewelry, . . . . .	97	90	173	11
16	Clothing, . . . . .	135	112	220	2
17	Cooking, lighting, and heating apparatus, . . . . .	36	20	31	-
18	Cordage and twine, . . . . .	27	14	19	-
19	Corks, bungs, and taps, . . . . .	3	3	4	-
20	Cotton goods, . . . . .	149	33	54	6
21	Cotton, woollen, and other textiles, . . . . .	3	1	3	-
22	Crayons, pencils, crucibles, etc., . . . . .	3	1	2	-
23	Drugs and medicines, . . . . .	23	14	21	2
24	Dyestuffs, . . . . .	5	3	4	1
25	Earthen, plaster, and stone ware, . . . . .	7	6	10	-
26	Electrical apparatus and appliances, . . . . .	15	8	12	-
27	Electroplating, . . . . .	9	9	11	-
28	Emery and sand paper and cloth, etc., . . . . .	10	2	3	-
29	Fancy articles, etc., . . . . .	5	4	7	-
30	Fertilizers, . . . . .	5	5	7	-

# PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

1893.

[There are duplications in the columns devoted to "Number of Private Firms," "Partners," "Number of Corporations," and "Stockholders." These duplications are indicated by an asterisk (\*). They are caused by the fact that the same firm or corporation is often engaged in manufacturing in two or more establishments located in different towns and sometimes in different industries. The plan adopted has been to consider each establishment (whether managed in connection with another or not) as one, and to credit the whole number of firms, partners, corporations, and stockholders to each industry, but to count them once only in making up the total for "All Industries."]

PARTNERS			Number of Corpora- tions	STOCKHOLDERS				AGGREGATES: Partners and Stockholders	
Special	Estates	Total		Males	Females	Banks, Trustees, etc.	Total		
-	-	8	5	66	21	1	90	98	1
-	-	13	5	94	26	11	131	144	2
-	1	76	11	383	242	65	690	766	3
-	-	54	-	-	-	-	-	54	4
18	6	*1,086	*45	*353	37	3	*393	*1,479	5
3	-	*180	15	110	19	2	131	*311	6
1	1	63	9	218	66	6	290	353	7
-	1	82	2	22	12	3	37	69	8
-	-	9	1	29	5	5	39	48	9
-	-	18	*8	*77	14	2	*93	*111	10
-	-	5	7	429	364	163	956	981	11
1	1	163	13	236	68	19	323	486	12
-	-	9	2	14	2	-	16	25	13
-	-	9	4	31	10	5	46	55	14
7	-	191	7	149	29	-	178	369	15
-	1	223	23	385	177	32	594	817	16
1	1	33	16	285	86	9	380	413	17
2	1	22	*13	*205	85	9	*299	*321	18
-	-	4	-	-	-	-	-	4	19
-	3	63	*116	*9,690	*7,296	*2,635	*19,621	*19,684	20
-	-	3	*2	*191	*159	*118	*468	*471	21
-	-	2	2	35	15	-	50	52	22
-	-	23	9	82	36	5	123	146	23
-	-	5	2	14	1	1	16	21	24
-	-	10	1	11	3	-	14	24	25
-	-	12	7	<sup>1</sup> 194	43	9	<sup>1</sup> 246	<sup>1</sup> 258	26
-	-	11	-	-	-	-	-	11	27
-	-	3	8	87	17	1	105	108	28
-	-	7	1	4	3	-	7	14	29
-	-	7	-	-	-	-	-	7	30

<sup>1</sup> Includes 1 syndicate.



10      **STATISTICS OF MANUFACTURES.**    [Pub. Doc.]

**PRIVATE FIRMS, PARTNERS, ETC.: BY INDUSTRIES — 1893**  
— Concluded.

	INDUSTRIES.	Number of Estab- lishments Considered	Number of Private Firms	PARTNERS	
				Males	Females
1	Fine arts and taxidermy, . . . . .	3	2	3	-
2	Flax, hemp, jute, and linen goods, . . . . .	7	4	11	-
3	Food preparations, . . . . .	300	262	370	3
4	Furniture, . . . . .	121	*109	*182	5
5	Glass, . . . . .	8	6	7	1
6	Glue, isinglass, and starch, . . . . .	18	14	26	2
7	Hair work (animal and human), . . . . .	9	9	8	1
8	Hose: rubber, linen, etc., . . . . .	3	1	1	-
9	Hosiery and knit goods, . . . . .	42	*28	*43	3
10	Ink, mucilage, and paste, . . . . .	9	9	13	-
11	Ivory, bone, shell, and horn goods, etc., . . . . .	10	10	16	1
12	Leather, . . . . .	148	*131	*219	-
13	Liquors and beverages (not spirituous), . . . . .	23	21	24	1
14	Liquors: malt, distilled, and fermented, . . . . .	53	40	66	6
15	Lumber, . . . . .	21	19	29	1
16	Machines and machinery, . . . . .	335	239	338	11
17	Metals and metallic goods, . . . . .	341	250	361	6
18	Mixed textiles, . . . . .	13	4	4	-
19	Models, lasts, and patterns, . . . . .	46	45	67	1
20	Musical instruments and materials, . . . . .	54	36	56	-
21	Oils and illuminating fluids, . . . . .	10	8	13	-
22	Paints, colors, and crude chemicals, . . . . .	20	14	27	-
23	Paper and paper goods, . . . . .	98	*32	*70	-
24	Perfumes, toilet articles, etc., . . . . .	5	3	3	-
25	Photographs and photographic materials, . . . . .	17	16	18	1
26	Polishes and dressing, . . . . .	29	24	38	3
27	Printing, publishing, and bookbinding, . . . . .	34	*23	*37	1
28	Print works, dye works, and bleacheries, . . . . .	44	30	40	4
29	Railroad construction and equipment, . . . . .	14	2	3	-
30	Rubber and elastic goods, . . . . .	34	*18	*31	1
31	Saddlery and harness, . . . . .	38	36	42	-
32	Scientific instruments and appliances, . . . . .	15	12	21	-
33	Shipbuilding, . . . . .	56	54	73	1
34	Silk and silk goods, . . . . .	12	5	6	1
35	Sporting and athletic goods, . . . . .	7	5	7	-
36	Stone, . . . . .	175	161	240	8
37	Straw and palm leaf goods, . . . . .	20	18	37	1
38	Tallow, candles, soap, and grease, . . . . .	62	58	80	1
39	Tobacco, snuff, and cigars, . . . . .	42	37	51	3
40	Toys and games (children's), . . . . .	8	5	8	2
41	Trunks and valises, . . . . .	7	7	11	-
42	Whips, lashes, and stocks, . . . . .	10	7	14	-
43	Wooden goods, . . . . .	163	151	204	9
44	Woollen goods, . . . . .	125	*87	*135	4
45	Worsted goods, . . . . .	20	9	18	1
46	ALL INDUSTRIES, . . . . .	4,397	3,478	5,292	129

PRIVATE FIRMS, PARTNERS, ETC.: BY INDUSTRIES — 1893  
— Concluded.

PARTNERS			Number of Corpora- tions	STOCKHOLDERS				AGGREGATES: Partners and Stockholders	
Special	Estates	Total		Males	Females	Banks, Trustees, etc.	Total		
-	-	3	1	9	1	-	10	13	1
-	-	11	3	27	27	9	63	74	2
3	-	376	*38	*1,492	94	9	*1,595	*1,971	3
5	1	*193	12	200	111	45	356	*549	4
-	-	8	2	27	1	1	29	37	5
-	1	29	4	35	4	-	39	68	6
-	-	9	-	-	-	-	-	9	7
-	-	1	2	36	21	5	112	113	8
-	-	*46	*14	*1,506	*383	*235	*1,214	*1,200	9
-	-	13	-	-	-	-	-	13	10
-	1	18	-	-	-	-	-	18	11
5	1	*225	*17	*193	*43	*4	*240	*465	12
1	-	26	2	40	5	1	46	72	13
-	-	72	*13	*1,81	11	7	*1,99	*1,171	14
-	-	30	2	13	15	6	39	69	15
1	7	357	*96	*1,2,745	*1,156	187	*1,4,068	*1,4,445	16
4	6	377	*91	*1,3,05	549	120	*1,1,974	*1,2,351	17
-	-	4	9	1,53	9	-	1,62	1,66	18
-	-	68	1	20	-	-	20	88	19
-	-	56	13	203	65	1	269	325	20
-	-	13	2	36	21	4	61	74	21
-	-	27	6	60	12	-	72	99	22
-	1	*71	*66	*844	*393	*66	*1,303	*1,374	23
-	-	3	2	7	-	-	7	10	24
-	-	19	1	9	-	-	9	23	25
1	-	42	5	31	7	1	39	81	26
1	-	*39	11	78	20	1	99	*138	27
-	-	44	*14	*606	*481	*454	*1,541	*1,585	28
-	-	3	*12	*1,82	7	3	*1,42	*1,45	29
-	-	*32	16	407	295	67	769	*801	30
-	1	43	2	65	14	-	79	122	31
1	-	22	3	53	4	5	67	89	32
-	-	74	2	33	11	-	49	123	33
-	-	7	7	172	40	5	217	224	34
1	-	8	2	10	-	-	10	13	35
-	-	243	14	233	103	10	401	649	36
-	-	33	2	10	5	1	16	54	37
-	-	31	4	11	7	-	18	99	38
-	-	54	5	36	4	1	41	95	39
-	-	10	3	13	-	-	13	23	40
-	-	11	-	-	-	-	-	11	41
-	-	14	3	133	54	17	204	218	42
-	1	214	17	160	24	15	199	413	43
1	3	*143	*33	*631	*351	159	*1,091	*1,234	44
2	-	21	*11	*303	*123	*46	*474	*495	45
59	39	5,519	872	*1,21,932	12,301	4,061	*1,33,234	*1,43,503	46

<sup>1</sup> Includes 6 syndicates.<sup>2</sup> Includes 1 syndicate.<sup>3</sup> Includes 4 syndicates.<sup>4</sup> Includes 2 syndicates.<sup>5</sup> Includes 10 railroads.<sup>6</sup> Includes 9 syndicates and 4 railroads.



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**CAPITAL INVESTED:**  
**BY INDUSTRIES.**

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## CAPITAL INVESTED: BY INDUSTRIES.

1892, 1893.

[In this presentation, the figures given under "Amount of Capital Invested" represent the returns made by the same establishments, in each industry, for the years 1892 and 1893, the whole number of establishments considered in "All Industries" being 4,397. Comparison is made, as regards the amount of capital invested, between these two years. The relative increase or decrease in 1893 as compared with 1892 is given with its equivalent percentage.]

INDUSTRIES.	Number of Estab- lishments Con- sidered	AMOUNT OF CAPITAL INVESTED		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Agricultural implements, . . .	11	\$1,395,811	\$1,344,389	-\$50,922	-3.65
Arms and ammunition, . . .	13	4,720,960	4,813,121	+92,161	+1.95
Artisans' tools, . . .	65	2,780,126	3,154,630	+374,504	+13.47
Awnings, sails, tents, etc., . .	39	181,925	168,007	-13,918	-7.65
Boots and shoes, . . .	712	29,067,583	29,303,026	+235,443	+0.81
Boxes (paper and wooden), . .	136	2,429,760	2,606,756	+176,996	+7.28
Brick, tiles, and sewer pipe, . .	49	1,675,676	1,782,580	+106,904	+6.38
Brooms, brushes, and mops, . .	21	813,644	814,729	+1,085	+0.13
Burial cases, caskets, coffins, etc., .	6	358,009	298,263	-59,746	-16.69
Buttons and dress trimmings, . .	19	918,781	952,435	+33,654	+3.66
Carpetings, . . .	11	7,828,754	7,993,248	+164,494	+2.10
Carriages and wagons, . . .	182	3,026,145	3,106,416	+82,271	+2.72
Cement, kaolin, lime, and plaster,	7	90,300	96,300	+6,000	+6.64
Chemical preparations (compound- ed), . . .	10	786,857	826,121	+39,264	+4.99
Clocks, watches, and jewelry, . .	97	5,327,142	5,095,165	-231,977	-4.35
Clothing, . . .	135	10,843,699	10,533,685	-310,014	-2.86
Cooking, lighting, and heating ap- paratus, . . .	36	2,608,627	2,538,827	-69,800	-2.68
Cordage and twine, . . .	27	5,022,559	6,160,346	+1,137,787	+22.65
Corks, bungs, and taps, . . .	3	28,500	20,500	-8,000	-28.07
Cotton goods, . . .	149	119,652,351	118,855,744	-796,607	-0.67
Cotton, woollen, and other textiles,	3	3,564,471	3,532,450	-32,021	-0.90
Crayons, pencils, crucibles, etc., .	3	60,000	60,000	*=	*=
Drugs and medicines, . . .	23	1,386,067	1,342,319	-43,748	-3.16
Dyestuffs, . . .	5	622,000	626,500	+4,500	+0.72
Earthen, plaster, and stone ware, .	7	399,050	398,960	-90	-0.02
Electrical apparatus and appliances,	15	10,772,741	10,834,900	+62,159	+0.58
Electroplating, . . .	9	47,600	46,100	-1,500	-3.15
Emery and sand paper and cloth, etc.,	10	773,853	789,965	+16,112	+2.08
Fancy articles, etc., . . .	5	60,000	62,468	+2,468	+4.11
Fertilizers, . . .	5	81,267	82,100	+833	+1.03
Fine arts and taxidermy, . . .	3	16,500	21,500	+5,000	+30.30
Flax, hemp, jute, and linen goods,	7	2,581,300	2,485,382	-95,918	-3.72
Food preparations, . . .	300	17,608,676	16,716,000	-892,676	-5.07
Furniture, . . .	121	5,436,654	5,386,102	-50,552	-0.93

\* No change in capital invested.

## CAPITAL INVESTED: BY INDUSTRIES — 1892, 1893 — Concluded.

INDUSTRIES.	Number of Estab- lishments Con- sidered	AMOUNT OF CAPITAL INVESTED		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Amounts	Percent- ages
Glass, . . . . .	8	\$499,500	\$530,500	+31,000	+6.21
Glue, isinglass, and starch, . . .	18	1,144,132	1,125,446	-18,686	-1.63
Hair work (animal and human), . .	9	204,500	224,500	+20,000	+9.78
Hose: rubber, linen, etc., . . .	3	755,681	705,000	-50,681	-6.71
Hosiery and knit goods, . . . .	42	3,590,745	4,515,560	+924,815	+25.76
Ink, mucilage, and paste, . . . .	9	294,000	293,000	-1,000	-0.34
Ivory, bone, shell, and horn goods, etc., . . . . .	10	212,183	205,600	-6,583	-3.10
Leather, . . . . .	148	8,011,549	7,963,904	-47,645	-0.59
Liquors and beverages (not spirit- uous), . . . . .	23	838,205	418,432	+75,227	+22.24
Liquors: malt, distilled, and fer- mented, . . . . .	53	7,307,634	7,823,013	+515,379	+7.05
Lumber, . . . . .	21	2,324,720	2,612,405	+287,685	+12.38
Machines and machinery, . . . .	835	30,811,473	32,917,618	+2,106,145	+6.84
Metals and metallic goods, . . . .	841	20,780,435	20,390,350	-390,085	-1.88
Mixed textiles, . . . . .	13	1,047,542	962,388	-85,154	-8.13
Models, lasts, and patterns, . . .	46	466,736	524,688	+57,952	+12.42
Musical instruments and materials, .	54	5,036,944	5,298,941	+261,997	+5.20
Oils and illuminating fluids, . . .	10	605,000	711,019	+106,019	+17.52
Paints, colors, and crude chemicals, .	20	1,181,405	1,003,364	-178,041	-15.07
Paper and paper goods, . . . . .	98	21,944,434	23,137,410	+1,192,976	+5.44
Perfumes, toilet articles, etc., . .	5	149,000	147,450	-1,550	-1.04
Photographs and photographic ma- terials, . . . . .	17	206,925	172,844	-34,081	-16.47
Polishes and dressing, . . . . .	29	976,084	1,014,723	+38,639	+3.96
Printing, publishing, and bookbind- ing, . . . . .	34	3,840,023	3,921,071	+81,048	+2.11
Print works, dye works, and bleach- eries, . . . . .	44	16,551,307	17,138,649	+1,587,342	+10.21
Railroad construction and equip- ment, . . . . .	14	1,777,000	1,762,000	-15,000	-0.84
Rubber and elastic goods, . . . .	34	10,344,439	11,148,812	+804,373	+7.78
Saddlery and harness, . . . . .	38	274,368	256,850	-17,518	-6.38
Scientific instruments and appli- ances, . . . . .	15	1,624,499	1,602,450	-22,049	-1.36
Shipbuilding, . . . . .	56	749,687	924,913	+175,226	+23.37
Silk and silk goods, . . . . .	12	2,345,741	2,631,460	+285,719	+12.18
Sporting and athletic goods, . . .	7	244,013	246,728	+2,713	+1.11
Stone, . . . . .	175	3,216,415	3,190,999	-25,416	-0.79
Straw and palm leaf goods, . . . .	20	1,848,327	2,022,044	+173,717	+9.40
Tallow, candles, soap, and grease, .	62	1,689,968	1,786,575	+96,607	+5.72
Tobacco, snuff, and cigars, . . . .	42	1,039,294	969,233	-70,061	-6.74
Toys and games (children's), . . .	8	344,000	330,000	-14,000	-4.07
Trunks and valises, . . . . .	7	85,900	81,200	-4,700	-5.47
Whips, lashes, and stocks, . . . .	10	713,604	857,000	+143,396	+20.09
Wooden goods, . . . . .	168	3,217,225	3,471,774	+254,549	+7.91
Woollen goods, . . . . .	125	27,220,349	25,554,880	-1,665,469	-6.12
Worsted goods, . . . . .	20	12,132,889	11,038,952	-1,093,937	-9.02
ALL INDUSTRIES, . . . . .	4,897	\$439,015,263	\$444,480,277	+\$5,465,014	+1.24



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**STOCK USED: BY INDUSTRIES.**

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## STOCK USED: BY INDUSTRIES.

1892, 1893.

[In this presentation, the figures given under "Value of Stock Used" represent the returns made by the same establishments, in each industry, for the years 1892 and 1893, the whole number of establishments considered in "All Industries" being 4,397. Comparison is made, as regards value of stock used, between these two years. The relative increase or decrease in 1893 as compared with 1892 is given with its equivalent percentage.]

INDUSTRIES.	Number of Estab- lishments Con- sidered	VALUE OF STOCK USED		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Agricultural implements, . . .	11	\$571,830	\$542,104	-\$29,226	-5.12
Arms and ammunition, . . .	13	584,950	569,129	-15,821	-2.70
Artisans' tools, . . .	65	743,569	792,228	+48,659	+6.54
Awnings, sails, tents, etc., . . .	39	320,820	230,511	-89,809	-28.04
Boots and shoes, . . .	712	62,667,535	55,028,688	-7,638,847	-12.19
Boxes (paper and wooden), . . .	136	2,602,582	2,374,105	-228,477	-8.78
Brick, tiles, and sewer pipe, . . .	49	411,847	405,477	-6,370	-1.55
Brooms, brushes, and mops, . . .	21	842,082	826,831	-15,251	-1.81
Burial cases, caskets, coffins, etc., . . .	6	193,735	196,521	+2,786	+1.44
Buttons and dress trimmings, . . .	19	670,526	559,784	-110,742	-16.52
Carpetings, . . .	11	5,218,619	4,787,252	-431,367	-8.27
Carriages and wagons, . . .	132	1,741,604	1,610,781	-130,823	-7.51
Cement, kaolin, lime, and plaster, . . .	7	167,540	184,026	+16,486	+9.84
Chemical preparations (compound- ed), . . .	10	570,250	471,037	-99,213	-17.40
Clocks, watches, and jewelry, . . .	97	2,318,361	1,781,400	-536,961	-23.16
Clothing, . . .	135	16,297,423	13,929,715	-2,367,718	-14.55
Cooking, lighting, and heating ap- paratus, . . .	36	1,113,993	957,000	-156,993	-14.09
Cordage and twine, . . .	27	6,462,752	6,225,632	-237,120	-3.70
Corks, bungs, and taps, . . .	3	15,449	13,642	-1,807	-11.70
Cotton goods, . . .	149	46,961,841	47,411,932	+450,091	+0.96
Cotton, woollen, and other textiles, . . .	3	1,780,097	1,461,530	-318,567	-17.90
Crayons, pencils, crucibles, etc., . . .	3	29,639	20,923	-8,716	-29.41
Drugs and medicines, . . .	23	1,953,196	1,606,074	-347,122	-17.77
Dyestuffs, . . .	5	684,269	422,354	-261,915	-38.25
Earthen, plaster, and stone ware, . . .	7	92,621	87,592	-5,029	-5.43
Electrical apparatus and appliances, . . .	15	3,504,241	2,423,098	-1,081,143	-30.85
Electroplating, . . .	9	21,971	22,927	+956	+4.35
Emery and sand paper and cloth, etc., . . .	10	366,566	301,649	-64,917	-17.71
Fancy articles, etc., . . .	5	56,879	51,945	-4,934	-8.67
Fertilizers, . . .	5	59,089	64,739	+5,650	+9.56
Fine arts and taxidermy, . . .	3	3,373	3,145	-230	-6.81
Flax, hemp, jute, and linen goods, . . .	7	2,001,258	2,185,182	+183,924	+9.20
Food preparations, . . .	300	65,810,561	63,570,337	-2,240,224	-3.40
Furniture, . . .	121	4,654,391	4,085,338	-569,053	-12.23

## STOCK USED: BY INDUSTRIES—1892, 1893—Concluded.

INDUSTRIES.	Number of Estab- lishments Con- sidered	VALUE OF STOCK USED		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Glass, . . . . .	8	\$126,038	\$91,514	—\$34,524	—27.39
Glue, isinglass, and starch, . . .	18	701,027	747,412	+46,385	+6.62
Hair work (animal and human), . .	9	416,316	277,225	—139,091	—33.41
Hose: rubber, linen, etc., . . .	3	535,135	454,036	—81,099	—15.15
Hosiery and knit goods, . . . . .	42	3,079,140	2,763,655	—315,485	—10.25
Ink, mucilage, and paste, . . . .	9	149,290	142,248	—7,042	—4.72
Ivory, bone, shell, and horn goods, etc., . . . . .	10	229,933	199,222	—30,766	—13.38
Leather, . . . . .	148	11,891,499	11,033,354	—858,145	—7.22
Liquors and beverages (not spirit- uous), . . . . .	23	397,236	426,336	+29,100	+7.33
Liquors: malt, distilled, and fer- mented, . . . . .	53	3,519,545	3,512,099	—7,446	—0.21
Lumber, . . . . .	21	1,750,490	1,744,533	—5,957	—0.34
Machines and machinery, . . . .	335	11,465,690	10,124,464	—1,341,226	—11.70
Metals and metallic goods, . . . .	341	12,723,710	10,863,682	—1,860,028	—14.62
Mixed textiles, . . . . .	13	1,186,107	1,102,216	—83,891	—7.07
Models, lasts, and patterns, . . .	46	267,098	239,909	—27,189	—10.18
Musical instruments and materials, .	54	2,655,058	1,925,262	—729,796	—27.49
Oils and illuminating fluids, . . .	10	908,161	811,599	—96,562	—10.63
Paints, colors, and crude chemicals, .	20	778,722	693,701	—85,021	—10.92
Paper and paper goods, . . . . .	98	15,170,117	14,376,840	—793,277	—5.23
Perfumes, toilet articles, etc., . .	5	143,445	196,640	+53,195	+37.08
Photographs and photographic ma- terials, . . . . .	17	103,372	60,772	—42,500	—41.15
Polishes and dressing, . . . . .	29	1,132,792	991,399	—141,393	—12.43
Printing, publishing, and bookbind- ing, . . . . .	34	1,210,015	1,203,208	—6,807	—0.56
Print works, dye works, and bleach- eries, . . . . .	44	14,117,102	13,664,265	—452,837	—3.21
Railroad construction and equip- ment, . . . . .	14	2,226,418	4,674,579	+2,448,161	+109.96
Rubber and elastic goods, . . . .	34	9,824,076	9,916,476	+92,400	+0.94
Saddlery and harness, . . . . .	38	243,544	178,077	—65,467	—26.88
Scientific instruments and appli- ances, . . . . .	15	843,251	653,096	—195,155	—23.01
Shipbuilding, . . . . .	56	433,606	463,816	+30,210	+6.97
Silk and silk goods, . . . . .	12	3,138,633	2,736,744	—401,889	—12.80
Sporting and athletic goods, . . .	7	166,503	139,947	—26,556	—15.95
Stone, . . . . .	175	1,031,177	1,057,258	+26,081	+2.53
Straw and palm leaf goods, . . . .	20	2,347,222	2,381,505	+34,283	+1.46
Tallow, candles, soap, and grease, .	62	2,354,632	2,336,150	—18,482	—0.78
Tobacco, snuff, and cigars, . . . .	42	1,541,321	1,652,061	+110,740	+7.18
Toys and games (children's), . . .	8	237,243	217,847	—19,396	—8.18
Trunks and valises, . . . . .	7	158,204	126,836	—31,368	—19.83
Whips, lashes, and stocks, . . . .	10	426,171	384,758	—41,413	—9.72
Wooden goods, . . . . .	163	2,826,120	2,649,297	—176,823	—6.26
Woollen goods, . . . . .	125	20,360,682	16,674,542	—3,686,140	—18.10
Worsted goods, . . . . .	20	12,239,108	9,948,697	—2,290,411	—18.71
ALL INDUSTRIES, . . . . .	4,397	\$376,554,375	\$348,991,905	—\$27,562,470	—7.32



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**GOODS MADE: BY INDUSTRIES.**

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# GOODS MADE: BY INDUSTRIES.

1892, 1893.

[In this presentation, the figures given under "Value of Goods Made and Work Done" represent the returns made by the same establishments, in each industry, for the years 1892 and 1893, the whole number of establishments considered in "All Industries" being 4,397. Comparison is made, as regards the value of goods made and work done, between these two years. The relative increase or decrease in 1893 as compared with 1892 is given with its equivalent percentage.]

INDUSTRIES.	Number of Estab- lishments Con- sidered	VALUE OF GOODS MADE AND WORK DONE		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Agricultural implements, . . .	11	\$1,212,890	\$1,141,502	—\$71,388	—5.89
Arms and ammunition, . . .	13	1,476,658	2,199,063	+722,425	+48.92
Artisans' tools, . . .	65	2,735,781	2,620,834	—114,947	—4.20
Awnings, sails, tents, etc., . . .	39	552,524	451,397	—101,127	—18.30
Boots and shoes, . . .	712	103,878,098	92,740,686	—11,137,412	—10.72
Boxes (paper and wooden), . . .	136	4,811,881	4,439,942	—371,939	—7.73
Brick, tiles, and sewer pipe, . . .	49	1,504,416	1,387,685	—116,731	—7.76
Brooms, brushes, and mops, . . .	21	1,476,365	1,424,790	—51,575	—3.49
Burial cases, caskets, coffins, etc., . . .	6	319,750	328,675	+8,925	+2.79
Buttons and dress trimmings, . . .	19	1,523,003	1,326,105	—196,898	—12.93
Carpetings, . . .	11	8,214,540	7,427,385	—787,155	—9.58
Carriages and wagons, . . .	132	4,171,404	3,887,001	—284,403	—6.82
Cement, kaolin, lime, and plaster, . . .	7	239,886	250,245	+10,359	+4.32
Chemical preparations (compound- ed), . . .	10	1,136,122	936,428	—199,694	—17.58
Clocks, watches, and jewelry, . . .	97	6,794,244	5,561,156	—1,233,088	—18.15
Clothing, . . .	135	27,284,723	24,014,804	—3,270,359	—11.99
Cooking, lighting, and heating ap- paratus, . . .	36	3,414,780	3,202,477	—212,303	—6.22
Cordage and twine, . . .	27	8,722,796	8,144,201	—578,595	—6.63
Corks, bungs, and taps, . . .	3	41,677	40,512	—1,165	—2.80
Cotton goods, . . .	149	90,811,928	88,189,618	—2,622,310	—2.89
Cotton, woollen, and other textiles, . . .	3	3,352,505	2,798,118	—554,387	—16.54
Crayons, pencils, crucibles, etc., . . .	3	62,054	38,843	—23,211	—37.40
Drugs and medicines, . . .	23	3,226,651	3,101,935	—124,716	—3.87
Dyestuffs, . . .	5	867,999	553,833	—314,166	—36.19
Earthen, plaster, and stone ware, . . .	7	343,787	324,436	—19,351	—6.98
Electrical apparatus and appliances, . . .	15	3,189,605	4,813,570	+1,623,965	+51.22
Electroplating, . . .	9	102,712	95,026	—7,686	—7.48
Emery and sand paper and cloth, etc., . . .	10	847,758	645,339	—202,419	—23.88
Fancy articles, etc., . . .	5	147,641	133,810	—13,831	—9.37
Fertilizers, . . .	5	94,204	109,801	+15,597	+16.66
Fine arts and taxidermy, . . .	3	19,800	23,498	+3,698	+18.68
Flax, hemp, jute, and linen goods, . . .	7	2,929,281	3,059,759	+130,478	+4.45
Food preparations, . . .	300	76,627,091	74,169,036	—2,458,055	—3.21
Furniture, . . .	121	8,693,460	7,698,186	—995,274	—11.45

## GOODS MADE: BY INDUSTRIES — 1892, 1893 — Concluded.

INDUSTRIES.	Number of Estab- lishments Con- sidered	VALUE OF GOODS MADE AND WORK DONE		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Glass, . . . . .	8	\$549,462	\$444,924	—\$104,538	—19.03
Glue, isinglass, and starch, . .	18	1,163,977	1,284,525	+120,548	+10.36
Hair work (animal and human), .	9	644,148	474,300	—169,848	—26.37
Hose: rubber, linen, etc., . .	8	838,650	786,483	—52,167	—6.23
Hosiery and knit goods, . . .	42	5,913,402	5,216,381	—697,021	—11.79
Ink, mucilage, and paste, . .	9	426,966	412,973	—13,993	—3.28
Ivory, bone, shell, and horn goods, etc., . . . . .	10	473,410	428,510	—44,900	—9.48
Leather, . . . . .	148	18,644,270	15,548,822	—3,095,448	—16.60
Liquors and beverages (not spirit- uous), . . . . .	23	791,568	742,636	—48,932	—6.18
Liquors: malt, distilled, and fer- mented, . . . . .	53	8,630,909	8,878,318	+247,409	+2.87
Lumber, . . . . .	21	2,826,426	2,587,980	—238,446	—8.44
Machines and machinery, . .	335	29,960,988	27,975,359	—1,985,629	—6.63
Metals and metallic goods, . .	341	26,259,252	22,878,245	—3,381,007	—12.83
Mixed textiles, . . . . .	13	1,838,645	1,638,269	—200,376	—10.90
Models, lasts, and patterns, . .	46	886,209	795,684	—90,525	—10.21
Musical instruments and materials,	54	6,229,274	3,916,694	—2,312,580	—37.12
Oils and illuminating fluids, . .	10	1,057,102	971,285	—85,817	—8.12
Paints, colors, and crude chemicals,	20	1,284,909	1,247,716	—37,193	—2.89
Paper and paper goods, . . .	98	26,029,658	22,746,104	—3,283,554	—12.61
Perfumes, toilet articles, etc., .	5	283,481	252,419	—31,062	—10.96
Photographs and photographic ma- terials, . . . . .	17	317,583	236,766	—80,817	—25.45
Polishes and dressing, . . .	29	1,987,454	1,814,405	—173,049	—8.71
Printing, publishing, and bookbind- ing, . . . . .	34	4,397,204	4,447,606	+50,402	+1.15
Print works, dye works, and bleach- eries, . . . . .	44	20,260,330	18,956,125	—1,304,205	—6.44
Railroad construction and equip- ment, . . . . .	14	4,275,835	7,255,656	+2,979,821	+69.69
Rubber and elastic goods, . . .	34	14,244,814	14,506,016	+261,202	+1.83
Saddlery and harness, . . .	38	518,697	386,487	—132,210	—25.49
Scientific instruments and appli- ances, . . . . .	15	1,739,197	1,583,069	—156,128	—8.98
Shipbuilding, . . . . .	56	1,191,999	1,114,403	—77,596	—6.51
Silk and silk goods, . . . .	12	4,952,024	3,939,629	—1,012,395	—20.44
Sporting and athletic goods, . .	7	449,765	335,050	—114,715	—25.51
Stone, . . . . .	175	4,036,599	4,218,530	+181,931	+4.51
Straw and palm leaf goods, . .	20	4,509,264	4,576,766	+67,502	+1.50
Tallow, candles, soap, and grease,	62	3,432,877	3,414,700	—18,177	—0.53
Tobacco, snuff, and cigars, . .	42	3,205,552	3,204,512	—1,040	—0.03
Toys and games (children's), . .	8	632,682	586,730	—45,952	—7.28
Trunks and valises, . . . .	7	295,119	240,018	—55,101	—18.67
Whips, lashes, and stocks, . .	10	1,078,496	987,538	—90,958	—8.37
Wooden goods, . . . . .	168	5,643,281	5,442,780	—200,501	—3.55
Woollen goods, . . . . .	126	34,071,848	23,061,654	—10,010,194	—29.38
Worsted goods, . . . . .	20	17,328,062	15,528,227	—1,799,835	—10.38
ALL INDUSTRIES, . . . .	4,397	\$639,137,402	\$687,343,550	—\$51,793,852	—8.10

# COMPARISON OF GOODS MADE. SAME ESTABLISHMENTS. FOR THE FIVE YEARS

1889 — 1893.

[In this presentation, the figures given under "Value of Goods Made and Work Done" represent the returns made by the same establishments, in each industry considered, for each of the five years 1889, 1890, 1891, 1892, and 1893, the whole number of establishments represented being 2,472. The table allows of comparison being made, as regards the value of goods made and work done, between any two years of the five years for which figures are given. The relative increase or decrease in 1890 as compared with 1889, in 1891 as compared with 1890, in 1892 as compared with 1891, and in 1893 as compared with 1892, is given, with its equivalent percentage.]

INDUSTRIES, AND YEARS.	Number of Estab- lishments (con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DE- CREASE (—), AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percent- ages
<i>Agricultural Implements.</i>				
1889, . . . . .	7	\$1,325,538	-	-
1890, . . . . .	7	1,391,066	+\$65,528	+4.94
1891, . . . . .	7	1,190,571	-200,495	-14.41
1892, . . . . .	7	1,207,526	+16,955	+1.42
1893, . . . . .	7	1,136,810	-71,216	-5.90
<i>Arms and Ammunition.</i>				
1889, . . . . .	10	\$1,814,277	-	-
1890, . . . . .	10	1,885,766	+\$71,489	+3.94
1891, . . . . .	10	2,203,806	+318,039	+16.87
1892, . . . . .	10	2,245,052	+41,247	+1.87
1893, . . . . .	10	2,044,297	-200,755	-8.94
<i>Artisans' Tools.</i>				
1889, . . . . .	23	\$1,892,836	-	-
1890, . . . . .	23	2,168,974	+\$276,638	+14.62
1891, . . . . .	23	2,313,703	+144,729	+6.67
1892, . . . . .	23	2,306,544	-7,159	-0.31
1893, . . . . .	23	2,199,854	-107,190	-4.65
<i>Awnings, Sails, Tents, etc.</i>				
1889, . . . . .	16	\$285,786	-	-
1890, . . . . .	16	409,571	+\$123,785	+43.31
1891, . . . . .	16	396,523	-13,048	-3.19
1892, . . . . .	16	396,663	+140	+0.04
1893, . . . . .	16	306,087	-90,576	-22.83
<i>Boots and Shoes.</i>				
1889, . . . . .	347	\$65,169,395	-	-
1890, . . . . .	347	70,361,433	+\$5,192,038	+7.97
1891, . . . . .	347	68,724,454	-1,636,979	-2.33
1892, . . . . .	347	74,791,927	+6,067,473	+8.83
1893, . . . . .	347	65,690,765	-9,101,162	-12.17



## GOODS MADE: BY INDUSTRIES — Continued.

COMPARISON OF GOODS MADE. SAME ESTABLISHMENTS.  
FOR THE FIVE YEARS 1889 — 1893 — Continued.

INDUSTRIES, AND YEARS.	Number of Estab- lishments Con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DE- CREASE (-), AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percent- ages
<i>Boxes (Paper and Wooden).</i>				
1889, . . . . .	94	\$3,616,018	-	-
1890, . . . . .	94	3,633,764	+\$17,746	+0.49
1891, . . . . .	94	3,678,256	+44,492	+1.23
1892, . . . . .	94	3,937,608	+259,352	+7.05
1893, . . . . .	94	3,702,219	-235,389	-5.98
<i>Brick, Tiles, and Sewer Pipe.</i>				
1889, . . . . .	33	\$1,015,233	-	-
1890, . . . . .	33	1,102,228	+\$86,995	+8.57
1891, . . . . .	33	1,140,365	+38,137	+3.46
1892, . . . . .	33	1,106,056	-34,309	-3.01
1893, . . . . .	33	1,017,817	-88,239	-7.98
<i>Brooms, Brushes, and Mops.</i>				
1889, . . . . .	18	\$1,218,016	-	-
1890, . . . . .	18	1,242,812	+\$24,796	+2.04
1891, . . . . .	18	1,274,611	+31,799	+2.56
1892, . . . . .	18	1,385,429	+110,818	+8.69
1893, . . . . .	18	1,333,930	-51,499	-3.72
<i>Burial Cases, Caskets, Coffins, etc.</i>				
1889, . . . . .	5	\$318,941	-	-
1890, . . . . .	5	310,089	-\$8,852	-2.78
1891, . . . . .	5	318,496	+8,407	+2.71
1892, . . . . .	5	316,114	-2,382	-0.75
1893, . . . . .	5	325,039	+8,925	+2.82
<i>Buttons and Dress Trimmings.</i>				
1889, . . . . .	15	\$1,302,200	-	-
1890, . . . . .	15	1,245,687	-\$56,513	-4.34
1891, . . . . .	15	1,388,414	+142,727	+11.46
1892, . . . . .	15	1,471,353	+82,939	+5.97
1893, . . . . .	15	1,232,626	-238,727	-16.22
<i>Carpetings.</i>				
1889, . . . . .	9	\$6,692,417	-	-
1890, . . . . .	9	7,293,059	+\$600,642	+8.97
1891, . . . . .	9	8,488,162	+1,195,103	+16.39
1892, . . . . .	9	7,654,985	-833,177	-9.33
1893, . . . . .	9	7,079,151	-575,834	-7.52
<i>Carriages and Wagons.</i>				
1889, . . . . .	48	\$1,991,832	-	-
1890, . . . . .	48	2,432,092	+\$440,260	+22.10
1891, . . . . .	48	2,495,398	+63,306	+2.60
1892, . . . . .	48	2,511,008	+15,610	+0.63
1893, . . . . .	48	2,254,332	-256,676	-10.23

## GOODS MADE: BY INDUSTRIES — Continued.

COMPARISON OF GOODS MADE. SAME ESTABLISHMENTS.  
FOR THE FIVE YEARS 1889 — 1893 — Continued.

INDUSTRIES, AND YEARS.	Number of Estab- lishments Con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DE- CREASE (—), AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percent- ages
<i>Cement, Kaolin, Lime, and Plaster.</i>				
1889, . . . . .	5	\$161,150	-	-
1890, . . . . .	5	157,900	—\$3,250	—2.02
1891, . . . . .	5	142,321	—15,579	—9.87
1892, . . . . .	5	156,536	+14,215	+9.99
1893, . . . . .	5	146,925	—9,611	—6.14
<i>Chemical Preparations (Compounded).</i>				
1889, . . . . .	7	\$373,129	-	-
1890, . . . . .	7	437,320	+\$64,191	+17.20
1891, . . . . .	7	425,015	—12,305	—2.81
1892, . . . . .	7	569,172	+144,157	+33.92
1893, . . . . .	7	456,888	—112,284	—19.73
<i>Clocks, Watches, and Jewelry.</i>				
1889, . . . . .	68	\$5,486,481	-	-
1890, . . . . .	68	5,791,025	+\$304,544	+5.55
1891, . . . . .	68	5,783,093	—7,932	—0.13
1892, . . . . .	68	6,020,370	+236,677	+4.09
1893, . . . . .	68	4,867,593	—1,152,777	—19.15
<i>Clothing.</i>				
1889, . . . . .	89	\$21,327,620	-	-
1890, . . . . .	89	22,475,910	+\$1,148,290	+5.38
1891, . . . . .	89	22,683,437	+207,527	+0.92
1892, . . . . .	89	23,561,920	+878,483	+3.87
1893, . . . . .	89	20,781,703	—2,780,217	—11.80
<i>Cooking, Lighting, and Heating Apparatus.</i>				
1889, . . . . .	24	\$2,778,421	-	-
1890, . . . . .	24	2,654,783	—\$123,638	—4.45
1891, . . . . .	24	2,867,418	+212,635	+8.01
1892, . . . . .	24	2,919,063	+51,645	+1.80
1893, . . . . .	24	2,775,627	—143,436	—4.91
<i>Cordage and Twine.</i>				
1889, . . . . .	18	\$7,337,259	-	-
1890, . . . . .	18	7,429,372	+\$92,113	+0.57
1891, . . . . .	18	7,590,508	+161,136	+2.17
1892, . . . . .	18	8,681,085	+1,090,577	+14.37
1893, . . . . .	18	8,106,726	—574,359	—6.62
<i>Corks, Bungs, and Taps.</i>				
1889, . . . . .	3	\$52,091	-	-
1890, . . . . .	3	51,397	—\$694	—1.33
1891, . . . . .	3	39,150	—12,247	—23.83
1892, . . . . .	3	41,677	+2,527	+6.45
1893, . . . . .	3	40,512	—1,165	—2.80

## GOODS MADE: BY INDUSTRIES — Continued.

COMPARISON OF GOODS MADE. SAME ESTABLISHMENTS.  
FOR THE FIVE YEARS 1889—1893—Continued.

INDUSTRIES, AND YEARS.	Number of Estab- lishments Con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DE- CREASE (—), AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percent- ages
<i>Cotton Goods.</i>				
1889, . . . . .	136	\$82,971,284	-	-
1890, . . . . .	136	86,232,332	+\$3,261,048	+3.93
1891, . . . . .	136	85,065,676	-1,166,657	-1.35
1892, . . . . .	136	86,987,750	+1,922,075	+2.26
1893, . . . . .	136	82,757,902	-4,229,848	-4.86
<i>Cotton, Woollen, and Other Textiles.</i>				
1889, . . . . .	3	\$3,019,690	-	-
1890, . . . . .	3	3,315,200	+\$295,510	+9.79
1891, . . . . .	3	3,673,724	+358,524	+10.81
1892, . . . . .	3	3,352,505	-321,219	-8.74
1893, . . . . .	3	2,798,118	-554,387	-16.54
<i>Crayons, Pencils, Crucibles, etc.</i>				
1889, . . . . .	3	\$65,795	-	-
1890, . . . . .	3	89,009	+\$23,214	+35.28
1891, . . . . .	3	129,685	+40,676	+45.70
1892, . . . . .	3	62,054	-67,631	-52.15
1893, . . . . .	3	38,843	-23,211	-37.40
<i>Drugs and Medicines.</i>				
1889, . . . . .	15	\$2,262,931	-	-
1890, . . . . .	15	2,432,621	+\$169,690	+7.50
1891, . . . . .	15	2,691,510	+258,889	+10.64
1892, . . . . .	15	2,652,115	-39,395	-1.46
1893, . . . . .	15	2,543,525	-108,590	-4.09
<i>Dyestuffs.</i>				
1889, . . . . .	5	\$975,965	-	-
1890, . . . . .	5	968,876	-\$7,089	-0.73
1891, . . . . .	5	923,522	-45,354	-4.68
1892, . . . . .	5	867,999	-55,523	-6.01
1893, . . . . .	5	553,833	-314,166	-36.19
<i>Earthen, Plaster, and Stone Ware.</i>				
1889, . . . . .	4	\$164,773	-	-
1890, . . . . .	4	207,341	+\$162,568	+98.68
1891, . . . . .	4	241,572	+34,231	+16.51
1892, . . . . .	4	237,000	-4,572	-1.89
1893, . . . . .	4	230,100	-6,900	-2.91
<i>Electrical Apparatus and Appliances.</i>				
1889, . . . . .	3	\$3,170,580	-	-
1890, . . . . .	3	12,665,045	+\$9,494,465	+299.46
1891, . . . . .	3	10,403,211	-2,261,834	-17.86
1892, . . . . .	3	7,538,753	-2,864,458	-37.53
1893, . . . . .	3	4,207,099	-3,331,654	-44.19

## GOODS MADE: BY INDUSTRIES — Continued.

COMPARISON OF GOODS MADE. SAME ESTABLISHMENTS.  
FOR THE FIVE YEARS 1889 — 1893 — Continued.

INDUSTRIES, AND YEARS.	Number of Estab- lishments Con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DE- CREASE (—), AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percent- ages
<i>Electroplating.</i>				
1889, . . . . .	4	\$47,010	-	-
1890, . . . . .	4	46,876	—\$185	—0.29
1891, . . . . .	4	51,237	+4,362	+9.31
1892, . . . . .	4	55,250	+4,013	+7.83
1893, . . . . .	4	50,026	—5,224	—9.46
<i>Emery and Sand Paper and Cloth, etc.</i>				
1889, . . . . .	8	\$665,465	-	-
1890, . . . . .	8	701,327	+\$35,842	+5.39
1891, . . . . .	8	768,634	+67,307	+9.60
1892, . . . . .	8	791,258	+22,624	+2.94
1893, . . . . .	8	694,589	—196,669	—24.86
<i>Fancy Articles, etc.</i>				
1889, . . . . .	4	\$95,315	-	-
1890, . . . . .	4	109,529	+\$14,214	+14.91
1891, . . . . .	4	122,392	+12,863	+11.74
1892, . . . . .	4	127,641	+5,249	+4.29
1893, . . . . .	4	113,810	—13,831	—10.84
<i>Fertilisers.</i>				
1889, . . . . .	3	\$83,400	-	-
1890, . . . . .	3	60,690	—\$22,710	—27.23
1891, . . . . .	3	59,170	—1,520	—2.50
1892, . . . . .	3	62,576	+3,406	+5.76
1893, . . . . .	3	78,304	+15,728	+25.13
<i>Fine Arts and Taxidermy.</i>				
1889, . . . . .	3	\$13,168	-	-
1890, . . . . .	3	13,700	+\$532	+4.04
1891, . . . . .	3	14,000	+300	+2.19
1892, . . . . .	3	19,800	+5,800	+41.43
1893, . . . . .	3	23,498	+3,698	+18.68
<i>Flax, Hemp, Jute, and Linen Goods.</i>				
1889, . . . . .	7	\$2,587,253	-	-
1890, . . . . .	7	3,046,540	+\$459,287	+17.75
1891, . . . . .	7	3,031,031	—15,509	—0.51
1892, . . . . .	7	2,929,281	—101,750	—3.36
1893, . . . . .	7	3,059,759	+130,478	+4.45
<i>Food Preparations.</i>				
1889, . . . . .	168	\$42,907,680	-	-
1890, . . . . .	168	44,700,020	+\$1,792,340	+4.18
1891, . . . . .	168	47,374,324	+2,674,304	+5.98
1892, . . . . .	168	56,445,464	+9,071,140	+19.15
1893, . . . . .	168	54,580,134	—1,865,330	—3.30

## GOODS MADE: BY INDUSTRIES — Continued.

COMPARISON OF GOODS MADE. SAME ESTABLISHMENTS.  
FOR THE FIVE YEARS 1889 — 1893 — Continued.

INDUSTRIES, AND YEARS.	Number of Estab- lishments Con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DE- CREASE (—). AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percent ages
<i>Furniture.</i>				
1889, . . . . .	80	\$6,304,185	-	-
1890, . . . . .	80	6,557,159	+\$252,974	+4.01
1891, . . . . .	80	6,837,670	+280,511	+4.23
1892, . . . . .	80	7,318,383	+480,713	+7.03
1893, . . . . .	80	6,384,241	—934,142	—12.76
<i>Glass.</i>				
1889, . . . . .	6	\$430,072	-	-
1890, . . . . .	6	422,975	—\$7,097	—1.65
1891, . . . . .	6	485,681	+62,706	+14.82
1892, . . . . .	6	508,835	+22,654	+4.66
1893, . . . . .	6	403,925	—104,410	—20.54
<i>Glue, Isinglass, and Starch.</i>				
1889, . . . . .	11	\$756,022	-	-
1890, . . . . .	11	892,266	+\$136,244	+18.02
1891, . . . . .	11	790,419	—101,847	—11.41
1892, . . . . .	11	819,597	+29,178	+3.69
1893, . . . . .	11	903,653	+84,056	+10.26
<i>Hair Work (Animal and Human).</i>				
1889, . . . . .	4	\$372,080	-	-
1890, . . . . .	4	471,000	+\$98,920	+26.59
1891, . . . . .	4	477,100	+6,100	+1.30
1892, . . . . .	4	587,248	+110,148	+23.09
1893, . . . . .	4	436,850	—150,898	—25.70
<i>Hosiery and Knit Goods.</i>				
1889, . . . . .	23	\$3,886,393	-	-
1890, . . . . .	23	4,000,415	+\$114,022	+2.93
1891, . . . . .	23	5,087,581	+1,087,166	+27.13
1892, . . . . .	23	5,293,579	+205,998	+4.05
1893, . . . . .	23	4,522,211	—771,368	—14.57
<i>Ink, Mucilage, and Paste.</i>				
1889, . . . . .	7	\$331,570	-	-
1890, . . . . .	7	384,698	+\$53,128	+16.02
1891, . . . . .	7	418,883	+34,185	+8.89
1892, . . . . .	7	416,363	—2,520	—0.60
1893, . . . . .	7	399,397	—16,966	—4.07
<i>Ivory, Bone, Shell, and Horn Goods, etc.</i>				
1889, . . . . .	9	\$380,137	-	-
1890, . . . . .	9	390,111	+\$9,974	+2.62
1891, . . . . .	9	438,701	+48,590	+12.46
1892, . . . . .	9	416,410	—22,291	—5.08
1893, . . . . .	9	371,410	—45,000	—10.81

## GOODS MADE: BY INDUSTRIES — Continued.

COMPARISON OF GOODS MADE. SAME ESTABLISHMENTS.  
FOR THE FIVE YEARS 1889 — 1893 — Continued.

INDUSTRIES, AND YEARS.	Number of Estab- lishments Con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DE- CREASE (—), AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percent- ages
<i>Leather.</i>				
1889, . . . . .	96	\$13,152,994	-	-
1890, . . . . .	96	13,749,172	+\$596,178	+4.53
1891, . . . . .	96	12,578,353	-1,170,819	-8.52
1892, . . . . .	96	14,085,589	+1,507,236	+11.98
1893, . . . . .	96	11,873,432	-2,212,157	-15.71
<i>Liquors and Beverages (Not Spirituous).</i>				
1889, . . . . .	6	\$238,241	-	-
1890, . . . . .	6	272,154	+\$33,913	+14.23
1891, . . . . .	6	280,134	+7,980	+2.93
1892, . . . . .	6	300,622	+20,488	+7.31
1893, . . . . .	6	272,162	-28,460	-9.47
<i>Liquors: Malt, Distilled, and Fermented.</i>				
1889, . . . . .	35	\$6,152,346	-	-
1890, . . . . .	35	6,247,274	+\$94,928	+1.54
1891, . . . . .	35	6,697,342	+450,068	+7.20
1892, . . . . .	35	6,720,003	+22,661	+0.34
1893, . . . . .	35	6,868,364	+148,361	+2.21
<i>Lumber.</i>				
1889, . . . . .	12	\$1,406,597	-	-
1890, . . . . .	12	1,891,849	+\$485,252	+34.50
1891, . . . . .	12	1,930,579	+38,730	+2.05
1892, . . . . .	12	2,295,981	+365,402	+18.93
1893, . . . . .	12	1,987,279	-308,702	-13.45
<i>Machines and Machinery.</i>				
1889, . . . . .	155	\$22,571,635	-	-
1890, . . . . .	155	22,261,718	-\$309,917	-1.37
1891, . . . . .	155	21,999,656	-262,062	-1.18
1892, . . . . .	155	22,972,745	+973,089	+4.42
1893, . . . . .	155	21,419,646	-1,553,099	-6.76
<i>Metals and Metallic Goods.</i>				
1889, . . . . .	180	\$18,893,683	-	-
1890, . . . . .	180	20,725,477	+\$1,831,794	+9.70
1891, . . . . .	180	20,357,854	-367,623	-1.77
1892, . . . . .	180	21,126,293	+768,439	+3.77
1893, . . . . .	180	18,381,177	-2,745,116	-12.99
<i>Mixed Textiles.</i>				
1889, . . . . .	11	\$1,547,305	-	-
1890, . . . . .	11	1,690,942	+\$143,637	+9.28
1891, . . . . .	11	1,671,547	-19,395	-1.15
1892, . . . . .	11	1,726,195	+54,648	+3.27
1893, . . . . .	11	1,543,869	-182,326	-10.56

## GOODS MADE: BY INDUSTRIES — Continued.

COMPARISON OF GOODS MADE. SAME ESTABLISHMENTS.  
FOR THE FIVE YEARS 1889 — 1893 — Continued.

INDUSTRIES, AND YEARS.	Number of Estab- lishments Con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DE- CREASE (—), AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percent- ages
<i>Models, Lasts, and Patterns.</i>				
1889, . . . . .	12	\$402,040	-	-
1890, . . . . .	12	465,428	+\$63,388	+15.77
1891, . . . . .	12	487,423	-28,005	-6.02
1892, . . . . .	12	493,185	+55,762	+12.75
1893, . . . . .	12	434,524	-58,661	-11.89
<i>Musical Instruments and Materials.</i>				
1889, . . . . .	37	\$4,707,110	-	-
1890, . . . . .	37	5,224,733	+\$517,623	+11.00
1891, . . . . .	37	5,074,694	-150,039	-2.87
1892, . . . . .	37	5,333,130	+258,436	+5.09
1893, . . . . .	37	4,205,058	-1,128,072	-21.15
<i>Oils and Illuminating Fluids.</i>				
1889, . . . . .	9	\$1,246,819	-	-
1890, . . . . .	9	1,181,660	-\$65,159	-5.23
1891, . . . . .	9	1,308,633	+126,973	+10.75
1892, . . . . .	9	1,048,102	-260,531	-19.91
1893, . . . . .	9	960,865	-87,737	-8.37
<i>Paints, Colors, and Crude Chemicals.</i>				
1889, . . . . .	14	\$856,879	-	-
1890, . . . . .	14	928,426	+\$71,547	+8.35
1891, . . . . .	14	877,737	-50,689	-5.46
1892, . . . . .	14	883,994	+6,257	+0.71
1893, . . . . .	14	873,053	-10,941	-1.24
<i>Paper and Paper Goods.</i>				
1889, . . . . .	73	\$19,154,210	-	-
1890, . . . . .	73	19,143,448	-\$10,762	-0.06
1891, . . . . .	73	19,817,103	+673,655	+3.52
1892, . . . . .	73	21,718,266	+1,901,163	+9.59
1893, . . . . .	73	19,126,115	-2,592,151	-11.94
<i>Photographs and Photographic Materials.</i>				
1889, . . . . .	6	\$199,313	-	-
1890, . . . . .	6	221,515	+\$22,202	+11.14
1891, . . . . .	6	215,256	-6,259	-2.83
1892, . . . . .	6	220,356	+5,100	+2.37
1893, . . . . .	6	149,246	-71,110	-32.27
<i>Polishes and Dressing.</i>				
1889, . . . . .	15	\$1,192,494	-	-
1890, . . . . .	15	1,289,049	+\$96,555	+8.10
1891, . . . . .	15	1,390,477	+101,428	+7.87
1892, . . . . .	15	1,438,633	+48,156	+3.46
1893, . . . . .	15	1,229,195	-209,438	-14.56

## GOODS MADE: BY INDUSTRIES — Continued.

COMPARISON OF GOODS MADE. SAME ESTABLISHMENTS.  
FOR THE FIVE YEARS 1889 — 1893 — Continued.

INDUSTRIES, AND YEARS.	Number of Estab- lishments Con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DE- CREASE (—), AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percent- ages
<i>Printing, Publishing, and Bookbinding.</i>				
1889, . . . . .	18	\$1,748,530	-	-
1890, . . . . .	18	1,723,306	—\$25,224	—1.44
1891, . . . . .	18	1,702,669	—20,637	—1.20
1892, . . . . .	18	1,756,831	+53,662	+3.15
1893, . . . . .	18	1,657,101	—99,230	—5.65
<i>Print Works, Dye Works, and Bleacheries.</i>				
1889, . . . . .	24	\$17,782,398	-	-
1890, . . . . .	24	18,573,172	+\$790,774	+4.45
1891, . . . . .	24	17,248,650	—1,324,522	—7.13
1892, . . . . .	24	19,883,880	+2,635,230	+15.28
1893, . . . . .	24	18,587,383	—1,296,497	—6.52
<i>Railroad Construction and Equipment.</i>				
1889, . . . . .	14	\$4,451,469	-	-
1890, . . . . .	14	3,905,124	—\$546,345	—12.37
1891, . . . . .	14	3,959,211	+54,087	+1.39
1892, . . . . .	14	4,275,835	+316,624	+8.00
1893, . . . . .	14	7,255,656	+2,979,821	+69.69
<i>Rubber and Elastic Goods.</i>				
1889, . . . . .	22	\$10,492,573	-	-
1890, . . . . .	22	11,288,793	+\$796,220	+7.59
1891, . . . . .	22	11,761,878	+473,085	+4.19
1892, . . . . .	22	12,817,903	+1,056,025	+8.98
1893, . . . . .	22	13,076,414	+258,511	+2.02
<i>Saddlery and Harness.</i>				
1889, . . . . .	8	\$224,821	-	-
1890, . . . . .	8	221,886	—\$2,935	—1.31
1891, . . . . .	8	240,558	+18,672	+8.42
1892, . . . . .	8	260,810	+20,252	+8.42
1893, . . . . .	8	195,490	—65,320	—25.05
<i>Scientific Instruments and Appliances.</i>				
1889, . . . . .	8	\$978,672	-	-
1890, . . . . .	8	1,185,543	+\$206,871	+21.14
1891, . . . . .	8	1,366,589	+181,046	+15.27
1892, . . . . .	8	1,516,966	+150,377	+11.00
1893, . . . . .	8	1,855,116	—161,850	—10.67
<i>Shipbuilding.</i>				
1889, . . . . .	14	\$752,535	-	-
1890, . . . . .	14	868,835	+\$116,300	+15.45
1891, . . . . .	14	1,025,317	+156,482	+18.01
1892, . . . . .	14	855,610	—169,707	—16.55
1893, . . . . .	14	759,888	—95,723	—11.19



## GOODS MADE: BY INDUSTRIES — Continued.

COMPARISON OF GOODS MADE. SAME ESTABLISHMENTS.  
FOR THE FIVE YEARS 1889 — 1893 — Continued.

INDUSTRIES, AND YEARS.	Number of Estab- lishments Con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DE- CREASE (-), AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percent- ages
<i>Silk and Silk Goods.</i>				
1889, . . . . .	9	\$4,488,421	-	-
1890, . . . . .	9	4,461,791	—\$26,630	—0.59
1891, . . . . .	9	4,510,716	+48,925	+1.10
1892, . . . . .	9	4,751,597	+240,881	+5.34
1893, . . . . .	9	3,723,822	—1,028,275	—21.64
<i>Sporting and Athletic Goods.</i>				
1889, . . . . .	6	\$197,805	-	-
1890, . . . . .	6	233,485	+ \$35,680	+18.04
1891, . . . . .	6	259,026	+25,541	+10.94
1892, . . . . .	6	274,765	+15,739	+6.08
1893, . . . . .	6	290,050	+15,285	+5.56
<i>Stones.</i>				
1889, . . . . .	61	\$2,849,650	-	-
1890, . . . . .	61	2,640,407	—\$209,243	—7.34
1891, . . . . .	61	2,848,704	+208,297	+7.89
1892, . . . . .	61	2,770,968	—77,736	—2.73
1893, . . . . .	61	2,737,975	—32,993	—1.19
<i>Straw and Palm Leaf Goods.</i>				
1889, . . . . .	16	\$3,765,404	-	-
1890, . . . . .	16	4,053,892	+ \$288,488	+7.66
1891, . . . . .	16	4,303,930	+250,038	+6.17
1892, . . . . .	16	4,230,846	—73,084	—1.70
1893, . . . . .	16	4,216,503	—14,343	—0.34
<i>Tallow, Candles, Soap, and Grease.</i>				
1889, . . . . .	37	\$3,149,232	-	-
1890, . . . . .	37	3,308,497	+ \$159,265	+5.06
1891, . . . . .	37	3,151,919	—156,578	—4.73
1892, . . . . .	37	3,264,909	+112,990	+3.58
1893, . . . . .	37	3,242,105	—22,804	—0.70
<i>Tobacco, Snuff, and Cigars.</i>				
1889, . . . . .	31	\$1,931,114	-	-
1890, . . . . .	31	2,341,658	+ \$410,544	+21.26
1891, . . . . .	31	2,432,265	+90,607	+3.57
1892, . . . . .	31	2,911,126	+478,861	+19.69
1893, . . . . .	31	2,891,868	—19,258	—0.66
<i>Toys and Games (Children's).</i>				
1889, . . . . .	7	\$453,067	-	-
1890, . . . . .	7	477,306	+ \$24,239	+5.35
1891, . . . . .	7	515,003	+37,697	+7.90
1892, . . . . .	7	589,240	+74,237	+14.41
1893, . . . . .	7	553,459	—35,781	—6.07

GOODS MADE: BY INDUSTRIES — Concluded.

COMPARISON OF GOODS MADE. SAME ESTABLISHMENTS.  
FOR THE FIVE YEARS 1889 — 1893 — Concluded.

INDUSTRIES, AND YEARS.	Number of Estab- lishments Con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DE- CREASE (—), AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percent- ages
<i>Trunks and Valises.</i>				
1889, . . . . .	7	\$211,077	-	-
1890, . . . . .	7	265,003	+\$53,925	+25.58
1891, . . . . .	7	269,465	+4,403	+1.66
1892, . . . . .	7	295,119	+25,654	+9.52
1893, . . . . .	7	240,018	-55,101	-18.67
<i>Whips, Lashes, and Stocks.</i>				
1889, . . . . .	5	\$674,264	-	-
1890, . . . . .	5	778,154	+\$103,890	+15.41
1891, . . . . .	5	800,543	+22,389	+10.59
1892, . . . . .	5	833,496	+27,953	+3.25
1893, . . . . .	5	847,088	-41,408	-4.66
<i>Wooden Goods.</i>				
1889, . . . . .	65	\$3,093,947	-	-
1890, . . . . .	65	3,303,422	+\$209,475	+6.77
1891, . . . . .	65	3,533,770	+230,348	+6.97
1892, . . . . .	65	3,483,334	-50,436	-1.43
1893, . . . . .	65	3,306,342	-176,992	-5.08
<i>Woollen Goods.</i>				
1889, . . . . .	98	\$26,713,548	-	-
1890, . . . . .	98	26,298,889	-\$414,659	-1.55
1891, . . . . .	98	29,271,278	+2,972,389	+11.30
1892, . . . . .	98	30,061,750	+790,481	+2.70
1893, . . . . .	98	24,855,894	-5,205,855	-17.32
<i>Worsted Goods.</i>				
1889, . . . . .	16	\$14,068,481	-	-
1890, . . . . .	16	14,620,211	+\$551,730	+3.92
1891, . . . . .	16	15,640,025	+1,019,814	+6.98
1892, . . . . .	16	16,109,732	+469,707	+3.00
1893, . . . . .	16	14,625,069	-1,484,663	-9.22
<b>TOTALS.</b>				
1889, . . . . .	2,472	\$465,447,602	-	-
1890, . . . . .	2,472	496,024,255	+\$30,576,653	+6.57
1891, . . . . .	2,472	501,768,326	+5,744,071	+1.16
1892, . . . . .	2,472	530,131,769	+23,363,443	+5.65
1893, . . . . .	2,472	484,288,854	-45,842,915	-8.65



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## **PERSONS EMPLOYED: BY INDUSTRIES.**

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## SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES.

[In this table, by the terms "Periods of employment of smallest number" and "Periods of employment of greatest number" are meant those times, *as regards aggregate number of persons employed*, when the smallest or greatest number, respectively, was employed. It must be borne in mind that the number of persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

### AGGREGATES — 1892.

INDUSTRIES.	Number of Estab- lishments Con- sidered	Aggregate Average Number of Persons Employed	AGGREGATES OF PERSONS EMPLOYED AT PERIODS OF EMPLOYMENT OF —		Excess of Greatest over Smallest Number
			Smallest Number	Greatest Number	
Agricultural implements, . . . . .	11	662	586	745	159
Arms and ammunition, . . . . .	13	2,131	2,032	2,336	304
Artisans' tools, . . . . .	65	1,809	1,680	1,936	256
Awnings, sails, tents, etc., . . . . .	39	198	130	296	166
Boots and shoes, . . . . .	712	48,859	40,761	56,611	15,850
Boxes (paper and wooden), . . . . .	136	3,400	2,993	3,836	843
Brick, tiles, and sewer pipe, . . . . .	49	1,309	693	1,983	1,290
Brooms, brushes, and mops, . . . . .	21	871	804	961	157
Burial cases, caskets, coffins, etc., . . . . .	6	185	181	188	7
Buttons and dress trimmings, . . . . .	19	1,253	1,050	1,442	392
Carpetings, . . . . .	11	4,703	4,434	4,919	485
Carriages and wagons, . . . . .	132	2,409	1,935	2,936	1,001
Cement, kaolin, lime, and plaster, . . . . .	7	96	78	119	41
Chemical preparations (compounded), . . . . .	10	322	265	350	74
Clocks, watches, and jewelry, . . . . .	97	3,688	3,172	4,234	1,062
Clothing, . . . . .	135	9,241	7,576	10,718	3,142
Cooking, lighting, and heating apparatus, . . . . .	36	2,256	1,773	2,463	690
Cordage and twine, . . . . .	27	3,415	2,678	4,111	1,433
Corks, bungs, and taps, . . . . .	3	87	34	39	5
Cotton goods, . . . . .	149	73,748	70,886	76,442	5,556
Cotton, woollen, and other textiles, . . . . .	3	2,270	2,007	2,472	465
Crayons, pencils, crucibles, etc., . . . . .	3	21	16	27	11
Drugs and medicines, . . . . .	23	466	386	533	147
Dyestuffs, . . . . .	5	164	134	185	51
Earthen, plaster, and stone ware, . . . . .	7	302	208	369	161
Electrical apparatus and appliances, . . . . .	15	4,089	3,632	4,473	841
Electroplating, . . . . .	9	81	72	87	15
Emery and sand paper and cloth, etc., . . . . .	10	294	271	319	48
Fancy articles, etc., . . . . .	5	105	98	115	17
Fertilizers, . . . . .	3	33	29	35	6

## PERSONS EMPLOYED: BY INDUSTRIES — Continued.

SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS  
EMPLOYED. AGGREGATES — 1892 — Concluded.

INDUSTRIES.	Number of Estab- lishments Con- sidered	Aggregate Average Number of Persons Employed	AGGREGATES OF PERSONS EMPLOYED AT PERIODS OF EMPLOYMENT OF —		Excess of Greatest over Smallest Number
			Smallest Number	Greatest Number	
Fine arts and taxidermy, . . . . .	3	12	8	17	9
Flax, hemp, jute, and linen goods, . . . . .	7	2,061	1,832	2,250	418
Food preparations, . . . . .	300	3,319	6,611	11,185	4,574
Furniture, . . . . .	121	4,095	3,568	4,617	1,049
Glass, . . . . .	8	501	422	561	139
Glue, isinglass, and starch, . . . . .	18	438	393	661	268
Hair work (animal and human), . . . . .	9	199	172	224	52
Hose: rubber, linen, etc., . . . . .	3	240	200	293	93
Hosiery and knit goods, . . . . .	42	4,711	3,820	5,771	1,951
Ink, mucilage, and paste, . . . . .	9	113	64	138	74
Ivory, bone, shell, and horn goods, etc., . . . . .	10	434	381	501	120
Leather, . . . . .	148	5,918	4,853	7,038	2,185
Liquors and beverages (not spirituous), . . . . .	23	265	207	362	155
Liquors: malt, distilled, and fermented, . . . . .	53	1,206	1,065	1,411	346
Lumber, . . . . .	21	821	694	932	238
Machines and machinery, . . . . .	335	17,979	15,597	20,495	4,898
Metals and metallic goods, . . . . .	341	14,356	12,366	16,058	3,693
Mixed textiles, . . . . .	13	772	708	820	112
Models, lasts, and patterns, . . . . .	46	420	366	467	101
Musical instruments and materials, . . . . .	54	3,352	3,078	3,539	461
Oils and illuminating fluids, . . . . .	10	150	122	202	80
Paints, colors, and crude chemicals, . . . . .	20	226	191	249	58
Paper and paper goods, . . . . .	98	10,085	9,197	10,724	1,527
Perfumes, toilet articles, etc., . . . . .	5	43	37	48	11
Photographs and photographic materials, . . . . .	17	157	131	174	43
Pollaxes and dressing, . . . . .	29	286	185	331	146
Printing, publishing, and bookbinding, . . . . .	34	2,194	2,038	2,379	341
Print works, dye works, and bleacheries, . . . . .	44	6,014	5,371	6,506	1,135
Railroad construction and equipment, . . . . .	14	2,971	2,557	3,288	731
Rubber and elastic goods, . . . . .	34	6,021	5,353	6,639	1,286
Saddlery and harness, . . . . .	38	258	233	284	51
Scientific instruments and appliances, . . . . .	15	1,195	1,024	1,351	327
Shipbuilding, . . . . .	56	665	400	1,011	611
Silk and silk goods, . . . . .	12	2,343	2,185	2,495	310
Sporting and athletic goods, . . . . .	7	313	186	420	234
Stone, . . . . .	175	3,424	1,914	5,039	3,125
Straw and palm leaf goods, . . . . .	20	2,373	583	4,022	3,439
Tallow, candles, soap, and grease, . . . . .	62	708	617	790	173
Tobacco, snuff, and cigars, . . . . .	42	1,784	1,254	2,082	828
Toys and games (children's), . . . . .	8	524	346	663	317
Trunks and valises, . . . . .	7	114	73	135	62
Whips, lashes, and stocks, . . . . .	10	436	406	461	55
Wooden goods, . . . . .	168	3,199	2,521	3,926	1,405
Woollen goods, . . . . .	125	17,100	15,204	18,313	3,109
Worsted goods, . . . . .	20	8,996	8,117	9,813	1,696
ALL INDUSTRIES, . . . . .	4,397	306,203	267,168	344,004	76,836

## SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES.

[In this table, by the terms "Periods of employment of smallest number" and "Periods of employment of greatest number" are meant those times, *as regards aggregate number of persons employed*, when the smallest or greatest number, respectively, was employed. It must be borne in mind that the number of persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

### AGGREGATES — 1893.

INDUSTRIES.	Number of Estab- lishments Con- sidered	Aggregate Average Number of Persons Employed	AGGREGATES OF PERSONS EMPLOYED AT PERIODS OF EMPLOYMENT OF —		Excess of Greatest over Smallest Number
			Smallest Number	Greatest Number	
Agricultural implements, . . . . .	11	636	540	707	167
Arms and ammunition, . . . . .	18	2,006	1,565	2,343	778
Artisans' tools, . . . . .	65	1,670	1,315	1,934	619
Awnings, sails, tents, etc., . . . . .	39	189	123	294	161
Boots and shoes, . . . . .	712	45,389	34,039	55,665	21,626
Boxes (paper and wooden), . . . . .	136	3,247	2,580	3,906	1,326
Brick, tiles, and sewer pipe, . . . . .	49	1,229	608	2,001	1,393
Brooms, brushes, and mops, . . . . .	21	849	713	956	243
Burial cases, caskets, coffins, etc., . . . . .	6	188	172	201	29
Buttons and dress trimmings, . . . . .	19	1,090	633	1,460	777
Carpetings, . . . . .	11	4,335	1,917	5,031	3,114
Carriages and wagons, . . . . .	132	2,128	1,460	2,808	1,348
Cement, kaolin, lime, and plaster, . . . . .	7	93	64	111	47
Chemical preparations (compounded), . . . . .	10	304	251	342	91
Clocks, watches, and jewelry, . . . . .	97	3,372	2,533	4,105	1,572
Clothing, . . . . .	135	7,544	5,502	9,230	3,728
Cooking, lighting, and heating apparatus, . . . . .	36	2,076	1,410	2,443	1,033
Cordage and twine, . . . . .	27	3,286	2,695	3,820	1,125
Corks, bungs, and taps, . . . . .	3	32	26	38	12
Cotton goods, . . . . .	149	73,540	61,785	78,949	17,164
Cotton, woollen, and other textiles, . . . . .	3	1,917	352	2,271	1,919
Crayons, pencils, crucibles, etc., . . . . .	3	18	15	22	7
Drugs and medicines, . . . . .	23	440	367	505	138
Dyestuffs, . . . . .	5	121	87	142	55
Earthen, plaster, and stone ware, . . . . .	7	322	226	416	190
Electrical apparatus and appliances, . . . . .	15	3,643	2,340	4,622	2,282
Electroplating, . . . . .	9	79	60	102	42
Emery and sand paper and cloth, etc., . . . . .	10	288	185	370	185
Fancy articles, etc., . . . . .	5	96	88	105	17
Fertilizers, . . . . .	5	81	23	36	13

## PERSONS EMPLOYED: BY INDUSTRIES — Continued.

SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS  
EMPLOYED. AGGREGATES — 1893 — Concluded.

INDUSTRIES.	Number of Estab- lishments Con- sidered	Aggregate Average Number of Persons Employed	AGGREGATES OF PERSONS EMPLOYED AT PERIODS OF EMPLOYMENT OF —		Excess of Greatest over Smallest Number
			Smallest Number	Greatest Number	
Fine arts and taxidermy, . . . . .	3	12	10	18	8
Flax, hemp, jute, and linen goods, . . .	7	2,141	1,961	2,294	343
Food preparations, . . . . .	300	7,301	5,932	10,721	4,789
Furniture, . . . . .	121	3,633	2,901	4,270	1,369
Glass, . . . . .	8	343	248	432	184
Glue, isinglass, and starch, . . . . .	18	428	355	629	274
Hair work (animal and human), . . . .	9	183	157	213	56
Hose: rubber, linen, etc., . . . . .	3	233	210	363	153
Hosiery and knit goods, . . . . .	42	4,757	3,635	5,733	2,048
Ink, mucilage, and paste, . . . . .	9	109	62	140	78
Ivory, bone, shell, and horn goods, etc., .	10	392	232	493	211
Leather, . . . . .	148	5,602	3,783	7,320	3,537
Liquors and beverages (not spirituous), .	23	247	131	373	192
Liquors: malt, distilled, and fermented, .	53	1,248	1,099	1,461	362
Lumber, . . . . .	21	870	706	1,041	335
Machines and machinery, . . . . .	335	17,495	12,621	21,216	8,595
Metals and metallic goods, . . . . .	341	13,313	10,336	15,611	5,275
Mixed textiles, . . . . .	13	760	551	868	317
Models, lasts, and patterns, . . . . .	46	417	341	498	147
Musical instruments and materials, . . .	54	2,726	1,755	3,307	1,552
Oils and illuminating fluids, . . . . .	10	140	104	227	123
Paints, colors, and crude chemicals, . .	20	221	130	264	84
Paper and paper goods, . . . . .	98	9,658	8,015	10,754	2,739
Perfumes, toilet articles, etc., . . . .	5	39	31	49	18
Photographs and photographic materials, .	17	123	104	146	42
Polishes and dressing, . . . . .	29	279	175	355	180
Printing, publishing, and bookbinding, .	34	2,141	1,995	2,315	320
Print works, dye works, and bleacheries, .	44	5,809	3,533	6,654	3,071
Railroad construction and equipment, . .	14	3,715	3,004	4,410	1,406
Rubber and elastic goods, . . . . .	34	6,161	5,263	6,833	1,570
Saddlery and harness, . . . . .	33	206	168	242	74
Scientific instruments and appliances, . .	15	1,076	793	1,370	472
Shipbuilding, . . . . .	56	672	403	1,076	663
Silk and silk goods, . . . . .	12	2,233	1,351	2,518	667
Sporting and athletic goods, . . . . .	7	233	155	364	209
Stone, . . . . .	175	3,394	2,520	5,103	2,583
Straw and palm leaf goods, . . . . .	20	2,335	451	4,079	3,628
Tallow, candles, soap, and grease, . . .	62	693	531	778	197
Tobacco, snuff, and cigars, . . . . .	42	1,710	1,275	2,118	843
Toys and games (children's), . . . . .	3	495	301	641	340
Trunks and valises, . . . . .	7	99	55	121	66
Whips, lashes, and stocks, . . . . .	10	325	106	466	360
Wooden goods, . . . . .	163	3,052	2,326	3,833	1,512
Woollen goods, . . . . .	125	15,857	11,240	18,581	7,341
Worsted goods, . . . . .	20	9,025	6,791	10,370	3,479
ALL INDUSTRIES, . . . . .	4,397	293,169	222,370	345,338	123,018



## SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES.

[In this table, averages for each establishment are given. These have been arrived at by dividing the aggregates given in the table on pages 38 and 39 by the number of establishments. It must be borne in mind that the number of persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

### AVERAGES — 1892.

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGES			
		NUMBER OF PERSONS EMPLOYED IN EACH ESTABLISHMENT			
		Average Number	<i>Smallest</i> Number	<i>Greatest</i> Number	Exceeds of <i>Greatest</i> over <i>Smallest</i> Number
Agricultural implements, . . . . .	11	60	53	68	15
Arms and ammunition, . . . . .	13	164	156	180	24
Artisans' tools, . . . . .	66	28	26	30	4
Awnings, sails, tents, etc., . . . . .	39	5	3	8	5
Boots and shoes, . . . . .	712	69	57	80	23
Boxes (paper and wooden), . . . . .	136	25	22	28	6
Brick, tiles, and sewer pipe, . . . . .	49	27	14	40	26
Brooms, brushes, and mops, . . . . .	21	41	38	46	8
Burial cases, caskets, coffins, etc., . . . . .	6	31	30	31	1
Buttons and dress trimmings, . . . . .	19	66	55	76	21
Carpetings, . . . . .	11	428	403	447	44
Carriages and wagons, . . . . .	132	18	15	22	7
Cement, kaolin, lime, and plaster, . . . . .	7	14	11	17	6
Chemical preparations (compounded), . . . . .	10	32	29	36	7
Clocks, watches, and jewelry, . . . . .	97	38	33	44	11
Clothing, . . . . .	135	68	56	79	23
Cooking, lighting, and heating apparatus, . . . . .	36	63	49	63	19
Cordage and twine, . . . . .	27	126	95	152	57
Corks, bungs, and taps, . . . . .	3	12	11	13	2
Cotton goods, . . . . .	149	495	476	513	37
Cotton, woollen, and other textiles, . . . . .	3	757	669	824	155
Crayons, pencils, crucibles, etc., . . . . .	3	7	5	9	4
Drugs and medicines, . . . . .	23	20	17	23	6
Dyestuffs, . . . . .	5	33	27	37	10
Earthen, plaster, and stone ware, . . . . .	7	43	30	53	23
Electrical apparatus and appliances, . . . . .	15	273	242	299	57
Electroplating, . . . . .	9	9	8	10	2
Emery and sand paper and cloth, etc., . . . . .	10	29	27	32	5
Fancy articles, etc., . . . . .	5	21	20	23	3
Fertilizers, . . . . .	5	7	6	7	1
Fine arts and taxidermy, . . . . .	3	4	3	6	3

## PERSONS EMPLOYED: BY INDUSTRIES — Continued.

SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS  
EMPLOYED. AVERAGES — 1892 — Concluded.

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGES			
		NUMBER OF PERSONS EMPLOYED IN EACH ESTABLISHMENT			
		Average Number	Smallest Number	Greatest Number	Excess of Greatest over Smallest Number
Flax, hemp, jute, and linen goods, . . .	7	294	262	321	59
Food preparations, . . . . .	300	23	22	37	15
Furniture, . . . . .	121	34	29	33	9
Glass, . . . . .	8	63	53	70	17
Glue, isinglass, and starch, . . . . .	18	24	22	37	15
Hair work (animal and human), . . . . .	9	22	19	25	6
Hose: rubber, linen, etc., . . . . .	3	80	67	98	31
Hosiery and knit goods, . . . . .	42	112	91	137	46
Ink, mucilage, and paste, . . . . .	9	13	7	15	8
Ivory, bone, shell, and horn goods, etc., . . . . .	10	43	33	50	12
Leather, . . . . .	148	40	33	48	15
Liquors and beverages (not spirituous), . . . . .	23	12	9	16	7
Liquors: malt, distilled, and fermented, . . . . .	53	23	20	27	7
Lumber, . . . . .	21	39	33	44	11
Machines and machinery, . . . . .	335	54	47	61	14
Metals and metallic goods, . . . . .	341	42	36	47	11
Mixed textiles, . . . . .	13	59	54	63	9
Models, lasts, and patterns, . . . . .	46	9	8	10	2
Musical instruments and materials, . . . . .	54	62	57	66	9
Oils and illuminating fluids, . . . . .	10	15	12	20	8
Paints, colors, and crude chemicals, . . . . .	20	11	10	12	2
Paper and paper goods, . . . . .	93	103	94	109	15
Perfumes, toilet articles, etc., . . . . .	5	9	7	10	3
Photographs and photographic materials, . . . . .	17	9	8	10	2
Polishes and dressing, . . . . .	29	10	6	11	5
Printing, publishing, and bookbinding, . . . . .	34	65	60	70	10
Print works, dye works, and bleacheries, . . . . .	44	137	122	148	26
Railroad construction and equipment, . . . . .	14	212	183	235	52
Rubber and elastic goods, . . . . .	34	177	157	195	38
Saddlery and harness, . . . . .	33	7	6	7	1
Scientific instruments and appliances, . . . . .	15	80	68	90	22
Shipbuilding, . . . . .	56	12	7	18	11
Silk and silk goods, . . . . .	12	195	182	208	26
Sporting and athletic goods, . . . . .	7	45	27	60	33
Stone, . . . . .	175	20	11	29	18
Straw and palm leaf goods, . . . . .	20	119	29	201	172
Tallow, candles, soap, and grease, . . . . .	62	11	10	13	3
Tobacco, snuff, and cigars, . . . . .	42	42	30	50	20
Toys and games (children's), . . . . .	8	66	43	85	42
Trunks and valises, . . . . .	7	16	10	19	9
Whips, lashes, and stocks, . . . . .	10	44	41	46	5
Wooden goods, . . . . .	163	19	15	23	8
Woollen goods, . . . . .	125	137	122	147	25
Worsted goods, . . . . .	20	450	406	491	85
ALL INDUSTRIES, . . . . .	4,397	70	61	78	17

## SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES.

[In this table, averages for each establishment are given. These have been arrived at by dividing the aggregates given in the table on pages 40 and 41 by the number of establishments. It must be borne in mind that the number of persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

### AVERAGES — 1893.

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGES			
		NUMBER OF PERSONS EMPLOYED IN EACH ESTABLISHMENT			
		Average Number	Smallest Number	Greatest Number	Excess of Greatest over Smallest Number
Agricultural implements, . . . . .	11	58	49	64	15
Arms and ammunition, . . . . .	13	154	120	180	60
Artisans' tools, . . . . .	65	26	20	30	10
Awnings, sails, tents, etc., . . . . .	39	5	3	7	4
Boots and shoes, . . . . .	712	64	48	78	30
Boxes (paper and wooden), . . . . .	136	24	19	29	10
Brick, tiles, and sewer pipe, . . . . .	49	25	12	41	29
Brooms, brushes, and mops, . . . . .	21	40	34	46	12
Burial cases, caskets, coffins, etc., . . . . .	6	31	29	34	5
Buttons and dress trimmings, . . . . .	19	57	36	77	41
Carpetings, . . . . .	11	394	174	457	283
Carriages and wagons, . . . . .	132	16	11	21	10
Cement, kaolin, lime, and plaster, . . . . .	7	13	9	16	7
Chemical preparations (compounded), . . . . .	10	30	25	34	9
Clocks, watches, and jewelry, . . . . .	97	35	26	42	16
Clothing, . . . . .	135	56	41	68	27
Cooking, lighting, and heating apparatus, . . . . .	36	58	39	68	29
Cordage and twine, . . . . .	27	122	100	141	41
Corks, bungs, and taps, . . . . .	3	11	9	13	4
Cotton goods, . . . . .	149	494	415	530	115
Cotton, woollen, and other textiles, . . . . .	3	639	117	757	640
Crayons, pencils, crucibles, etc., . . . . .	3	6	5	7	2
Drugs and medicines, . . . . .	23	19	16	22	6
Dyestuffs, . . . . .	5	24	17	23	11
Earthen, plaster, and stone ware, . . . . .	7	46	32	59	27
Electrical apparatus and appliances, . . . . .	15	243	156	308	152
Electroplating, . . . . .	9	9	7	11	4
Emery and sand paper and cloth, etc., . . . . .	10	29	19	37	18
Fancy articles, etc., . . . . .	5	19	18	21	3
Fertilizers, . . . . .	5	6	5	7	2
Fine arts and taxidermy, . . . . .	3	4	3	6	3

PERSONS EMPLOYED: BY INDUSTRIES — Continued.  
SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS  
EMPLOYED. AVERAGES — 1893 — Concluded.

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGES			
		NUMBER OF PERSONS EMPLOYED IN EACH ESTABLISHMENT			
		Average Number	Smallest Number	Greatest Number	Excess of Greatest over Smallest Number
Flax, hemp, jute, and linen goods, . . .	7	306	279	328	49
Food preparations, . . . . .	300	26	20	36	16
Furniture, . . . . .	121	30	24	35	11
Glass, . . . . .	8	44	31	54	23
Glue, isinglass, and starch, . . . . .	13	24	20	35	15
Hair work (animal and human), . . . . .	9	20	17	24	7
Hose: rubber, linen, etc., . . . . .	8	94	70	121	51
Hosiery and knit goods, . . . . .	42	113	88	137	49
Ink, mucilage, and paste, . . . . .	9	12	7	16	9
Ivory, bone, shell, and horn goods, etc., . . . . .	10	39	23	49	21
Leather, . . . . .	146	33	26	49	23
Liquors and beverages (not spirituous), . . . . .	23	11	8	16	8
Liquors: malt, distilled, and fermented, . . . . .	53	24	21	28	7
Lumber, . . . . .	21	41	34	50	16
Machines and machinery, . . . . .	335	52	38	63	25
Metals and metallic goods, . . . . .	341	39	30	46	16
Mixed textiles, . . . . .	13	58	42	67	25
Models, lasts, and patterns, . . . . .	46	9	7	11	4
Musical instruments and materials, . . . . .	54	50	33	61	28
Oils and illuminating fluids, . . . . .	10	14	10	23	13
Paints, colors, and crude chemicals, . . . . .	20	11	9	13	4
Paper and paper goods, . . . . .	98	99	82	110	28
Perfumes, toilet articles, etc., . . . . .	5	8	6	10	4
Photographs and photographic materials, . . . . .	17	8	6	9	3
Pollaxes and dressing, . . . . .	29	10	6	12	6
Printing, publishing, and bookbinding, . . . . .	34	63	59	68	9
Print works, dye works, and bleacheries, . . . . .	44	132	81	151	70
Railroad construction and equipment, . . . . .	14	265	215	315	100
Rubber and elastic goods, . . . . .	34	181	155	201	46
Saddlery and harness, . . . . .	33	5	4	6	2
Scientific instruments and appliances, . . . . .	15	72	53	85	32
Shipbuilding, . . . . .	56	12	7	19	12
Silk and silk goods, . . . . .	12	186	154	210	56
Sporting and athletic goods, . . . . .	7	40	22	52	30
Stone, . . . . .	175	22	14	29	15
Straw and palm leaf goods, . . . . .	20	117	23	204	181
Tallow, candles, soap, and grease, . . . . .	62	11	9	13	4
Tobacco, snuff, and cigars, . . . . .	42	41	30	50	20
Toys and games (children's), . . . . .	8	62	33	80	42
Trunks and valises, . . . . .	7	14	8	17	9
Whips, lashes, and stocks, . . . . .	10	33	11	47	36
Wooden goods, . . . . .	163	18	14	23	9
Woollen goods, . . . . .	125	127	90	149	59
Worsted goods, . . . . .	20	451	340	514	174
ALL INDUSTRIES, . . . . .	4,397	67	51	79	28

## RANGE OF EMPLOYMENT AND UNEMPLOYMENT: BY INDUSTRIES.

1892, 1893.

[In this presentation, the excess of greatest over smallest number of persons employed for 1892 and 1893 is brought forward from the tables on pages 38 to 41, inclusive, and a comparison is made between the two years. The relative increase or decrease in the excess of greatest number over smallest number of persons employed in 1893 as compared with 1892 is given with its equivalent percentage. It must be borne in mind that the number of persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

INDUSTRIES.	Number of Estab- lishments Con- sidered	EXCESS OF GREATEST OVER SMALLEST NUMBER OF PERSONS EMPLOYED		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Number	Percent- ages
Agricultural implements, . . . . .	11	159	167	+8	+5.03
Arms and ammunition, . . . . .	13	304	778	+474	+155.92
Artisans' tools, . . . . .	65	256	619	+363	+141.80
Awnings, sails, tents, etc., . . . . .	39	166	161	-5	-3.01
Boots and shoes, . . . . .	712	15,850	21,626	+5,776	+36.44
Boxes (paper and wooden), . . . . .	136	843	1,326	+483	+57.30
Brick, tiles, and sewer pipe, . . . . .	49	1,285	1,393	+108	+8.40
Brooms, brushes, and mops, . . . . .	21	157	243	+86	+54.73
Burial cases, caskets, coffins, etc., . . . . .	6	7	29	+22	+314.29
Buttons and dress trimmings, . . . . .	19	392	777	+385	+98.21
Carpetings, . . . . .	11	485	3,114	+2,629	+542.03
Carriages and wagons, . . . . .	132	1,001	1,348	+347	+34.67
Cement, kaolin, lime, and plaster, . . . . .	7	41	47	+6	+14.63
Chemical preparations (compounded), . . . . .	10	74	91	+17	+22.97
Clocks, watches, and jewelry, . . . . .	97	1,062	1,572	+510	+48.03
Clothing, . . . . .	135	3,142	3,728	+586	+18.63
Cooking, lighting, and heating apparatus, . . . . .	36	690	1,033	+343	+49.71
Cordage and twine, . . . . .	27	1,533	1,125	-408	-26.61
Corks, bungs, and taps, . . . . .	3	5	12	+7	+140.00
Cotton goods, . . . . .	149	5,556	17,164	+11,608	+208.93
Cotton, woollen, and other textiles, . . . . .	3	465	1,919	+1,454	+312.69
Crayons, pencils, crucibles, etc., . . . . .	3	11	7	-4	-36.36
Drugs and medicines, . . . . .	23	152	133	-19	-12.50
Dyestuffs, . . . . .	5	51	55	+4	+7.84
Earthen, plaster, and stone ware, . . . . .	7	161	190	+29	+18.01
Electrical apparatus and appliances, . . . . .	15	846	2,282	+1,436	+169.74
Electroplating, . . . . .	9	15	42	+27	+180.00
Emery and sand paper and cloth, etc., . . . . .	10	48	185	+137	+285.42
Fancy articles, etc., . . . . .	5	17	17	=	=
Fertilizers, . . . . .	5	6	13	+7	+116.67
Fine arts and taxidermy, . . . . .	3	9	8	-1	-11.11

\* No change.

## PERSONS EMPLOYED: BY INDUSTRIES — Concluded.

## RANGE OF EMPLOYMENT AND UNEMPLOYMENT: BY INDUSTRIES — 1892, 1893 — Concluded.

INDUSTRIES.	Number of Estab- lishments Con- sidered	EXCESS OF GREATEST OVER SMALLEST NUMBER OF PERSONS EMPLOYED		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Number	Percent- ages
Flax, hemp, jute, and linen goods, . . .	7	418	343	-75	-17.94
Food preparations, . . . . .	300	4,574	4,739	+215	+4.70
Furniture, . . . . .	121	1,049	1,369	+320	+30.51
Glass, . . . . .	8	139	184	+45	+32.37
Glue, isinglass, and starch, . . . . .	18	268	274	+6	+2.24
Hair work (animal and human), . . . . .	9	52	56	+4	+7.69
Hose: rubber, linen, etc., . . . . .	3	98	153	+55	+56.12
Hosiery and knit goods, . . . . .	42	1,951	2,043	+92	+4.71
Ink, mucilage, and paste, . . . . .	9	74	78	+4	+5.41
Ivory, bone, shell, and horn goods, etc., . . . . .	10	120	211	+91	+75.83
Leather, . . . . .	148	2,185	3,537	+1,352	+61.88
Liquors and beverages (not spirituous), . . . . .	23	155	192	+37	+23.87
Liquors: malt, distilled, and fermented, . . . . .	53	346	362	+16	+4.62
Lumber, . . . . .	21	238	335	+97	+40.76
Machines and machinery, . . . . .	335	4,398	8,595	+4,197	+95.43
Metals and metallic goods, . . . . .	341	3,693	5,275	+1,582	+42.84
Mixed textiles, . . . . .	13	112	317	+205	+183.04
Models, lasts, and patterns, . . . . .	46	101	147	+46	+45.54
Musical instruments and materials, . . . . .	54	461	1,552	+1,091	+236.66
Oils and illuminating fluids, . . . . .	10	80	123	+43	+53.75
Paints, colors, and crude chemicals, . . . . .	20	58	84	+26	+44.83
Paper and paper goods, . . . . .	98	1,527	2,739	+1,212	+79.37
Perfumes, toilet articles, etc., . . . . .	5	11	18	+7	+63.64
Photographs and photographic materials, . . . . .	17	43	42	-1	-2.33
Pollaxes and dressing, . . . . .	29	146	180	+34	+23.29
Printing, publishing, and bookbinding, . . . . .	34	341	320	-21	-6.16
Print works, dye works, and bleacheries, . . . . .	44	1,135	3,071	+1,936	+170.57
Railroad construction and equipment, . . . . .	14	731	1,406	+675	+92.34
Rubber and elastic goods, . . . . .	34	1,236	1,570	+334	+27.02
Saddlery and harness, . . . . .	38	51	74	+23	+45.10
Scientific instruments and appliances, . . . . .	15	327	472	+145	+44.34
Shipbuilding, . . . . .	56	611	668	+57	+9.33
Silk and silk goods, . . . . .	12	310	667	+357	+115.16
Sporting and athletic goods, . . . . .	7	234	209	-25	-10.68
Stone, . . . . .	175	3,125	2,583	-542	-17.34
Straw and palm leaf goods, . . . . .	20	3,439	3,628	+189	+5.50
Tallow, candles, soap, and grease, . . . . .	62	173	197	+24	+13.87
Tobacco, snuff, and cigars, . . . . .	42	828	843	+15	+1.81
Toys and games (children's), . . . . .	8	337	340	+3	+0.89
Trunks and valises, . . . . .	7	62	66	+4	+6.45
Whips, lashes, and stocks, . . . . .	10	55	360	+305	+554.55
Wooden goods, . . . . .	168	1,405	1,512	+107	+7.62
Woollen goods, . . . . .	125	3,109	7,241	+4,132	+132.92
Worsted goods, . . . . .	20	1,696	3,479	+1,783	+105.13
ALL INDUSTRIES, . . . . .	4,397	76,836	123,018	+46,182	+60.10



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**WAGES PAID: BY INDUSTRIES.**

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## WAGES PAID: BY INDUSTRIES.

1892, 1893.

[In this presentation, the figures given under "Total Amount Paid in Wages During the Year," represent the returns made by the same establishments, in each industry, for the years 1892 and 1893, the whole number of establishments considered in "All Industries" being 4,397. Comparison is made, as regards the total amount paid in wages, between these two years. The relative increase or decrease in 1893 as compared with 1892 is given with its equivalent percentage. It must be borne in mind that these figures represent the sums paid to wage earners only and do not include amounts paid to officers, clerks, or other salaried persons.]

INDUSTRIES.	Number of Estab- lishments Con- sidered	TOTAL AMOUNT PAID IN WAGES DURING THE YEAR		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Agricultural implements, . . . . .	11	\$353,884	\$325,434	—\$28,450	—8.04
Arms and ammunition, . . . . .	13	1,276,524	1,145,461	—131,063	—10.27
Artisans' tools, . . . . .	65	969,087	881,685	—87,402	—9.02
Awnings, sails, tents, etc., . . . . .	39	108,957	107,768	—1,189	—1.09
Boots and shoes, . . . . .	712	25,533,508	22,618,569	—2,914,939	—11.42
Boxes (paper and wooden), . . . . .	136	1,366,440	1,287,998	—78,442	—5.74
Brick, tiles, and sewer pipe, . . . . .	49	600,353	566,168	—34,185	—5.69
Brooms, brushes, and mops, . . . . .	21	320,167	306,018	—14,149	—4.42
Burial cases, caskets, coffins, etc., . . . . .	6	100,484	102,136	+1,652	+1.64
Buttons and dress trimmings, . . . . .	19	467,967	407,855	—60,112	—12.55
Carpetings, . . . . .	11	1,823,229	1,589,019	—234,210	—12.55
Carriages and wagons, . . . . .	132	1,434,453	1,305,483	—128,970	—8.99
Cement, kaolin, lime, and plaster, . . . . .	7	45,684	43,145	—2,539	—5.56
Chemical preparations (compound- ed), . . . . .	10	192,656	176,784	—15,872	—8.24
Clocks, watches, and jewelry, . . . . .	97	2,100,621	1,763,752	—336,869	—16.04
Clothing, . . . . .	135	8,697,186	8,101,421	—595,765	—6.85
Cooking, lighting, and heating ap- paratus, . . . . .	36	1,406,106	1,300,806	—105,300	—7.49
Cordage and twine, . . . . .	27	1,200,192	1,149,812	—50,380	—4.20
Corks, bungs, and taps, . . . . .	3	11,066	9,706	—1,360	—12.29
Cotton goods, . . . . .	149	25,515,747	25,269,510	—247,237	—0.97
Cotton, woollen, and other textiles, . . . . .	3	856,455	702,016	—154,439	—18.03
Crayons, pencils, crucibles, etc., . . . . .	3	10,644	7,893	—2,751	—25.85
Drugs and medicines, . . . . .	23	191,297	175,319	—15,978	—8.35
Dyestuffs, . . . . .	5	88,732	63,458	—25,274	—28.48
Earthen, plaster, and stone ware, . . . . .	7	180,625	154,837	—25,788	—14.27
Electrical apparatus and appliances, . . . . .	15	2,344,009	1,601,832	—742,177	—31.66
Electroplating, . . . . .	9	40,477	39,720	—757	—1.87
Emery and sand paper and cloth, etc., . . . . .	10	158,435	140,969	—17,466	—11.02
Fancy articles, etc., . . . . .	5	40,715	36,194	—4,521	—11.10
Fertilizers, . . . . .	5	16,264	14,416	—1,848	—11.36
Fine arts and taxidermy, . . . . .	3	9,024	7,058	—1,966	—21.79
Flax, hemp, jute, and linen goods, . . . . .	7	650,057	650,127	+40	+0.01
Food preparations, . . . . .	300	4,086,756	3,684,017	—402,739	—9.83
Furniture, . . . . .	121	2,058,842	1,757,435	—301,407	—14.64
Glass, . . . . .	8	273,077	211,521	—61,556	—22.54

## WAGES PAID: BY INDUSTRIES — Continued.

## WAGES PAID: BY INDUSTRIES — 1892, 1893 — Concluded.

INDUSTRIES.	Number of Estab- lishments Con- sidered	TOTAL AMOUNT PAID IN WAGES DURING THE YEAR		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Glue, isinglass, and starch, . . .	18	\$196,269	\$192,927	—\$3,342	—1.70
Hair work (animal and human), . .	9	76,233	62,835	—13,453	—17.63
Hose: rubber, linen, etc., . . .	3	96,658	106,435	+9,777	+10.12
Hosiery and knit goods, . . .	42	1,632,068	1,525,238	—106,830	—6.55
Ink, mucilage, and paste, . . .	9	48,768	47,766	—1,002	—2.05
Ivory, bone, shell, and horn goods, etc., . . . . .	10	176,304	157,314	—18,990	—10.77
Leather, . . . . .	148	3,003,501	2,748,051	—255,450	—8.51
Liquors and beverages (not spirit- uous), . . . . .	23	146,056	134,872	—11,184	—7.66
Liquors: malt, distilled, and fer- mented, . . . . .	53	858,291	915,690	+57,399	+6.69
Lumber, . . . . .	21	384,491	381,570	—2,921	—0.76
Machines and machinery, . . .	335	10,107,731	9,470,094	—637,637	—6.31
Metals and metallic goods, . . .	341	7,424,150	6,726,827	—697,323	—9.39
Mixed textiles, . . . . .	13	283,421	282,293	—1,128	—0.40
Models, lasts, and patterns, . . .	46	297,485	283,519	—13,966	—4.69
Musical instruments and materials,	54	2,210,920	1,712,136	—498,784	—22.56
Oils and illuminating fluids, . . .	10	68,365	66,746	—1,619	—2.37
Paints, colors, and crude chemicals,	20	122,663	117,429	—5,224	—4.26
Paper and paper goods, . . .	98	4,269,230	3,957,802	—311,428	—7.29
Perfumes, toilet articles, etc., . .	5	16,318	15,616	—702	—4.30
Photographs and photographic ma- terials, . . . . .	17	99,905	80,876	—19,029	—19.05
Pollshes and dressing, . . .	29	139,184	136,845	—2,339	—1.68
Printing, publishing, and bookbind- ing, . . . . .	31	1,198,585	1,238,803	+40,218	+3.36
Print works, dye works, and bleach- eries, . . . . .	44	2,599,143	2,425,173	—173,970	—6.69
Railroad construction and equip- ment, . . . . .	14	1,783,725	2,286,271	+502,546	+28.17
Rubber and elastic goods, . . .	34	2,535,224	2,856,355	+321,131	+12.67
Saddlery and harness, . . .	38	140,956	106,704	—34,252	—24.30
Scientific instruments and appli- ances, . . . . .	15	535,271	449,456	—85,815	—16.03
Shipbuilding, . . . . .	56	467,672	458,900	—8,772	—1.88
Silk and silk goods, . . . . .	12	798,801	729,114	—69,687	—8.72
Sporting and athletic goods, . . .	7	157,733	134,689	—23,044	—14.61
Stone, . . . . .	175	1,888,009	2,097,036	+209,027	+11.07
Straw and palm leaf goods, . . .	20	1,136,069	1,143,257	+7,188	+0.63
Tallow, candles, soap, and grease, .	62	830,940	837,003	+6,063	+1.83
Tobacco, snuff, and cigars, . . .	42	1,026,942	1,067,974	+41,032	+4.00
Toys and games (children's), . . .	8	221,554	196,511	—25,043	—11.30
Trunks and valises, . . . . .	7	67,766	54,406	—13,360	—19.71
Whips, lashes, and stocks, . . .	10	201,042	154,904	—46,138	—22.95
Wooden goods, . . . . .	168	1,712,341	1,636,757	—75,584	—4.41
Woollen goods, . . . . .	125	6,661,085	5,883,015	—778,070	—11.68
Worsted goods, . . . . .	20	3,321,837	2,202,796	—1,119,041	—33.69
ALL INDUSTRIES, . . . . .	4,397	\$137,972,501	\$127,286,397	—\$10,686,104	—7.75

## AVERAGE YEARLY EARNINGS: BY INDUSTRIES.

1892, 1893.

[The average yearly earnings, shown in this presentation, have been obtained by dividing the total amount paid in wages during the years 1892 and 1893 (pages 50 and 51) by the average number of persons employed during the same years (pages 38 to 41 inclusive). The relative increase or decrease in average yearly earnings in 1893 as compared with 1892 is given with its equivalent percentage. It must be borne in mind that these figures represent the sums paid to wage earners only and do not include amounts paid to officers, clerks, or other salaried persons.]

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGE YEARLY EARNINGS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Agricultural implements, . . . . .	11	\$534.57	\$511.69	—\$22.88	—4.33
Arms and ammunition, . . . . .	13	599.03	571.02	—28.01	—4.63
Artisans' tools, . . . . .	65	535.70	527.96	—7.74	—1.44
Awnings, sails, tents, etc., . . . . .	39	564.54	570.20	+5.66	+1.00
Boots and shoes, . . . . .	712	522.60	498.33	—24.27	—4.64
Boxes (paper and wooden), . . . . .	136	401.89	396.67	—5.22	—1.30
Brick, tiles, and sewer pipe, . . . . .	49	458.63	460.67	+2.04	+0.44
Brooms, brushes, and mops, . . . . .	21	367.59	360.45	—7.14	—1.94
Burial cases, caskets, coffins, etc., . . . . .	6	543.16	543.28	+0.12	+0.02
Buttons and dress trimmings, . . . . .	19	373.48	374.18	+0.70	+0.19
Carpetings, . . . . .	11	387.67	366.56	—21.11	—5.45
Carriages and wagons, . . . . .	132	595.46	613.48	+18.02	+3.03
Cement, kaolin, lime, and plaster, . . . . .	7	475.88	463.92	—11.96	—2.51
Chemical preparations (compounded), . . . . .	10	598.31	581.53	—16.78	—2.80
Clocks, watches, and jewelry, . . . . .	97	569.58	523.06	—46.52	—8.17
Clothing, . . . . .	136	400.09	411.11	+11.02	+2.75
Cooking, lighting, and heating apparatus, . . . . .	36	623.27	626.59	+3.32	+0.53
Cordage and twine, . . . . .	27	351.45	349.91	—1.54	—0.44
Corks, bungs, and taps, . . . . .	3	299.08	303.31	+4.23	+1.41
Cotton goods, . . . . .	149	345.99	343.60	—2.39	—0.69
Cotton, woollen, and other textiles, . . . . .	3	377.29	366.21	—11.08	—2.94
Crayons, pencils, crucibles, etc., . . . . .	3	506.86	438.50	—68.36	—13.49
Drugs and medicines, . . . . .	23	410.51	398.45	—12.06	—2.94
Dyestuffs, . . . . .	5	541.05	524.45	—16.60	—3.07
Earthen, plaster, and stone ware, . . . . .	7	598.10	480.86	—117.24	—19.60
Electrical apparatus and appliances, . . . . .	15	573.25	439.72	—133.53	—23.29
Electroplating, . . . . .	9	499.72	502.78	+3.06	+0.61
Emery and sand paper and cloth, etc., . . . . .	10	538.89	489.48	—49.41	—9.17
Fancy articles, etc., . . . . .	5	387.76	377.02	—10.74	—2.77
Fertilizers, . . . . .	5	492.85	465.03	—27.82	—5.64
Fine arts and taxidermy, . . . . .	3	752.00	588.17	—163.83	—21.79

## WAGES PAID: BY INDUSTRIES — Concluded.

AVERAGE YEARLY EARNINGS: BY INDUSTRIES — 1892, 1893  
— Concluded.

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGE YEARLY EARNINGS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Flax, hemp, jute, and linen goods, . . .	7	\$315.42	\$303.66	-\$11.76	-3.73
Food preparations, . . . . .	300	491.26	472.25	-19.01	-3.87
Furniture, . . . . .	121	502.77	483.74	-19.03	-3.79
Glass, . . . . .	8	545.06	607.82	+62.76	+11.51
Glue, isinglass, and starch, . . . . .	18	448.10	450.76	+2.66	+0.59
Hair work (animal and human), . . . . .	9	383.36	343.36	-40.00	-10.43
Hose: rubber, linen, etc., . . . . .	3	402.74	376.10	-26.64	-6.61
Hosiery and knit goods, . . . . .	42	346.44	320.63	-25.81	-7.45
Ink, mucilage, and paste, . . . . .	9	431.58	438.22	+6.64	+1.54
Ivory, bone, shell, and horn goods, etc., . . . . .	10	406.23	401.31	-4.92	-1.21
Leather, . . . . .	148	507.52	490.55	-16.97	-3.34
Liquors and beverages (not spirituous), . . . . .	23	551.15	546.04	-5.11	-0.93
Liquors: malt, distilled, and fermented, . . . . .	53	711.68	733.73	+22.05	+3.10
Lumber, . . . . .	21	468.32	438.59	-29.73	-6.35
Machines and machinery, . . . . .	335	562.20	541.30	-20.90	-3.72
Metals and metallic goods, . . . . .	341	517.15	505.28	-11.87	-2.30
Mixed textiles, . . . . .	13	367.13	371.44	+4.31	+1.17
Models, lasts, and patterns, . . . . .	46	708.80	679.90	-28.40	-4.01
Musical instruments and materials, . . . . .	54	659.58	628.08	-31.50	-4.78
Oils and illuminating fluids, . . . . .	10	455.77	476.76	+20.99	+4.61
Paints, colors, and crude chemicals, . . . . .	20	542.71	531.35	-11.36	-2.09
Paper and paper goods, . . . . .	98	423.82	409.80	-13.52	-3.19
Perfumes, toilet articles, etc., . . . . .	5	379.49	400.41	+20.92	+5.51
Photographs and photographic materials, . . . . .	17	636.84	631.84	-4.50	-0.71
Polishes and dressing, . . . . .	29	486.66	490.48	+3.82	+0.78
Printing, publishing, and bookbinding, . . . . .	34	546.30	578.61	+32.31	+5.91
Print works, dye works, and bleacheries, . . . . .	44	432.18	417.49	-14.69	-3.40
Railroad construction and equipment, . . . . .	14	600.38	615.42	+15.04	+2.51
Rubber and elastic goods, . . . . .	34	421.06	463.62	+42.56	+10.11
Saddlery and harness, . . . . .	38	546.34	517.98	-28.36	-5.19
Scientific instruments and appliances, . . . . .	15	447.93	417.71	-30.22	-6.75
Shipbuilding, . . . . .	56	703.27	682.89	-20.38	-2.90
Silk and silk goods, . . . . .	12	340.93	326.52	-14.41	-4.23
Sporting and athletic goods, . . . . .	7	503.94	475.93	-28.01	-5.56
Stone, . . . . .	175	551.40	538.53	-12.87	-2.33
Straw and palm leaf goods, . . . . .	20	478.75	489.62	+10.87	+2.27
Tallow, candles, soap, and grease, . . . . .	62	467.43	486.30	+18.87	+4.04
Tobacco, snuff, and cigars, . . . . .	42	575.64	624.55	+48.91	+8.50
Toys and games (children's), . . . . .	8	422.81	396.99	-25.82	-6.11
Trunks and valises, . . . . .	7	594.44	549.56	-44.88	-7.55
Whips, lashes, and stocks, . . . . .	10	461.11	476.63	+15.52	+3.37
Wooden goods, . . . . .	168	535.27	536.29	+1.02	+0.19
Woollen goods, . . . . .	125	389.54	371.00	-18.54	-4.76
Worsted goods, . . . . .	20	369.26	244.08	-125.18	-33.90
ALL INDUSTRIES, . . . . .	4,397	\$450.59	\$434.17	-\$16.42	-3.64



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**PROPORTION OF BUSINESS DONE**  
**AND**  
**DAYS IN OPERATION:**  
**BY INDUSTRIES.**

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## PROPORTION OF BUSINESS DONE: BY INDUSTRIES.

1892, 1893.

[The figures given in this presentation represent the average proportion of business done by each establishment in the industries considered. Greatest capacity, or maximum production, has been considered as 100 per cent, and the percentages given indicate the average proportion of business done by each establishment during each year on the basis stated. Comparison is made between 1892 and 1893, and the relative increase or decrease in 1893 as compared with 1892 is given with its equivalent percentage.]

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGE PRO- PORTION OF BUSINESS DONE		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Proportion	Percent- ages
Agricultural implements, . . . . .	11	63.55	58.00	-5.55	-8.73
Arms and ammunition, . . . . .	13	63.85	54.77	-9.08	-14.22
Artisans' tools, . . . . .	65	65.80	55.98	-9.82	-14.92
Awnings, sails, tents, etc., . . . . .	89	41.92	37.10	-4.82	-11.50
Boots and shoes, . . . . .	712	69.50	48.59	-20.91	-30.09
Boxes (paper and wooden), . . . . .	136	69.41	59.88	-9.53	-13.73
Brick, tiles, and sewer pipe, . . . . .	49	74.45	69.88	-4.57	-6.14
Brooms, brushes, and mops, . . . . .	21	71.62	59.05	-12.57	-17.55
Burial cases, caskets, coffins, etc., . . . . .	6	82.17	82.33	+0.16	+0.19
Buttons and dress trimmings, . . . . .	19	64.47	48.05	-16.42	-25.47
Carpetings, . . . . .	11	80.64	69.27	-11.37	-14.10
Carriages and wagons, . . . . .	132	68.69	61.31	-7.38	-10.74
Cement, kaolin, lime, and plaster, . . . . .	7	74.86	73.57	-1.29	-1.72
Chemical preparations (compounded), . . . . .	10	66.00	53.30	-12.70	-19.24
Clocks, watches, and jewelry, . . . . .	97	64.14	52.33	-11.81	-18.41
Clothing, . . . . .	135	73.50	63.57	-9.93	-13.51
Cooking, lighting, and heating apparatus, . . . . .	86	72.94	62.06	-10.88	-14.92
Cordage and twine, . . . . .	27	74.70	65.07	-9.63	-12.89
Corks, bungs, and taps, . . . . .	3	57.00	58.33	+1.33	+2.33
Cotton goods, . . . . .	149	93.77	86.09	-7.63	-8.19
Cotton, woollen, and other textiles, . . . . .	3	71.67	69.33	-2.34	-3.26
Crayons, pencils, crucibles, etc., . . . . .	3	66.67	53.33	-13.34	-20.01
Drugs and medicines, . . . . .	23	57.43	55.61	-1.82	-3.17
Dyestuffs, . . . . .	5	59.00	49.40	-9.60	-16.27
Earthen, plaster, and stone ware, . . . . .	7	66.71	70.57	+3.86	+5.79
Electrical apparatus and appliances, . . . . .	15	73.00	67.00	-6.00	-8.22
Electroplating, . . . . .	9	60.89	53.33	-7.56	-12.42
Emery and sand paper and cloth, etc., . . . . .	10	83.10	58.40	-24.70	-29.72
Fancy articles, etc., . . . . .	5	80.00	69.20	-10.80	-13.50
Fertilizers, . . . . .	5	55.00	54.00	-1.00	-1.82

**PROPORTION OF BUSINESS DONE: BY INDUSTRIES — 1892,  
1893 — Concluded.**

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGE PRO- PORTION OF BUSINESS DONE		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Proportion	Percent- ages
Fine arts and taxidermy, . . . . .	8	90.00	75.00	—15.00	—16.67
Flax, hemp, jute, and linen goods, . . .	7	81.00	76.86	—4.14	—5.11
Food preparations, . . . . .	300	63.27	59.80	—3.47	—5.48
Furniture, . . . . .	121	68.12	58.82	—9.30	—13.65
Glass, . . . . .	8	71.88	67.88	—4.00	—5.56
Glue, isinglass, and starch, . . . . .	18	76.50	70.22	—6.28	—8.21
Hair work (animal and human), . . . . .	9	58.33	48.11	—10.22	—17.52
Hose: rubber, linen, etc., . . . . .	3	75.00	56.67	—18.33	—24.44
Hosiery and knit goods, . . . . .	42	67.36	57.76	—9.60	—14.26
Ink, mucilage, and paste, . . . . .	9	44.11	41.44	—2.67	—6.05
Ivory, bone, shell, and horn goods, etc., .	10	76.70	69.90	—6.80	—8.87
Leather, . . . . .	148	70.21	60.53	—9.68	—13.97
Liquors and beverages (not spirituous), .	23	58.35	52.83	—5.52	—9.46
Liquors: malt, distilled, and fermented, .	53	60.85	56.38	—4.47	—7.35
Lumber, . . . . .	21	73.62	69.38	—4.24	—5.76
Machines and machinery, . . . . .	335	68.47	59.20	—9.27	—13.54
Metals and metallic goods, . . . . .	341	69.32	59.37	—9.95	—14.35
Mixed textiles, . . . . .	13	81.46	74.00	—7.46	—9.16
Models, lasts, and patterns, . . . . .	46	65.20	59.33	—5.87	—9.00
Musical instruments and materials, . . .	54	74.26	60.33	—13.93	—18.76
Oils and illuminating fluids, . . . . .	10	64.20	54.50	—9.70	—15.11
Paints, colors, and crude chemicals, . .	20	66.25	61.20	—5.05	—7.62
Paper and paper goods, . . . . .	98	84.98	73.66	—11.32	—13.32
Perfumes, toilet articles, etc., . . . . .	5	80.00	60.00	—20.00	—25.00
Photographs and photographic materials,	17	56.35	46.94	—9.41	—16.70
Pollishes and dressing, . . . . .	29	65.17	54.28	—10.89	—16.71
Printing, publishing, and bookbinding, .	34	72.53	66.06	—6.47	—8.92
Print works, dye works, and bleacheries,	44	68.09	61.86	—6.23	—9.15
Railroad construction and equipment, .	14	89.43	83.36	—6.07	—6.79
Rubber and elastic goods, . . . . .	34	74.59	65.74	—8.85	—11.86
Saddlery and harness, . . . . .	38	66.87	53.34	—13.53	—20.23
Scientific instruments and appliances, .	15	64.60	55.80	—8.20	—12.81
Shipbuilding, . . . . .	56	44.16	40.82	—3.34	—7.56
Silk and silk goods, . . . . .	12	75.00	49.75	—25.25	—33.67
Sporting and athletic goods, . . . . .	7	62.86	52.57	—10.29	—16.37
Stone, . . . . .	175	57.08	56.00	—1.08	—1.89
Straw and palm leaf goods, . . . . .	20	75.15	70.30	—4.85	—6.45
Tallow, candles, soap, and grease, . .	62	67.27	61.08	—6.19	—9.20
Tobacco, snuff, and cigars, . . . . .	42	69.21	61.14	—8.07	—11.66
Toys and games (children's), . . . . .	8	80.13	71.88	—8.25	—10.30
Trunks and valises, . . . . .	7	84.29	75.29	—9.00	—10.68
Whips, lashes, and stocks, . . . . .	10	67.90	63.80	—4.10	—6.04
Wooden goods, . . . . .	168	64.80	57.86	—6.94	—10.71
Woollen goods, . . . . .	125	87.46	74.03	—13.43	—15.36
Worsted goods, . . . . .	20	90.15	77.40	—12.75	—14.14
ALL INDUSTRIES, . . . . .	4,397	69.38	59.18	—10.20	—14.70



## DAYS IN OPERATION: BY INDUSTRIES.

1892, 1893.

[The figures given in this presentation represent the average number of days in operation for each establishment in the industries considered. The average number of days in operation is based upon the average number of persons employed, the number of days being multiplied by the figures representing the average number of persons, and the sum divided by the aggregate average number of persons, an average for each industry and for All Industries being thus obtained. Comparison is made between 1892 and 1893, and the relative increase or decrease in 1893 as compared with 1892 is given with its equivalent percentage.]

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGE NUMBER OF DAYS IN OPERATION		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Days	Percent- ages
Agricultural implements, . . . . .	11	292.72	280.05	-12.67	-4.33
Arms and ammunition, . . . . .	13	291.10	283.28	-7.82	-2.69
Artisans' tools, . . . . .	65	295.98	275.17	-20.81	-7.03
Awnings, sails, tents, etc., . . . . .	39	280.17	279.99	-0.18	-0.06
Boots and shoes, . . . . .	712	293.56	274.41	-19.15	-6.52
Boxes (paper and wooden), . . . . .	136	294.96	274.58	-20.38	-6.91
Brick, tiles, and sewer pipe, . . . . .	49	238.23	231.46	-6.77	-2.84
Brooms, brushes, and mops, . . . . .	21	303.27	291.37	-11.90	-3.92
Burial cases, caskets, coffins, etc., . . . . .	6	306.13	304.35	-1.78	-0.58
Buttons and dress trimmings, . . . . .	19	298.74	269.33	-29.41	-9.84
Carpetings, . . . . .	11	303.33	247.53	-55.80	-18.40
Carriages and wagons, . . . . .	132	298.03	289.24	-8.79	-2.95
Cement, kaolin, lime, and plaster, . . . . .	7	296.85	288.97	-7.88	-2.65
Chemical preparations (compounded), . . . . .	10	302.21	297.03	-5.18	-1.71
Clocks, watches, and jewelry, . . . . .	97	286.46	260.54	-25.92	-9.05
Clothing, . . . . .	135	296.97	279.53	-17.44	-5.87
Cooking, lighting, and heating apparatus, . . . . .	36	281.07	265.50	-15.57	-5.54
Cordage and twine, . . . . .	27	295.19	284.08	-11.11	-3.76
Corks, bungs, and taps, . . . . .	3	298.32	296.00	-2.32	-0.78
Cotton goods, . . . . .	149	304.85	282.09	-22.76	-7.47
Cotton, woollen, and other textiles, . . . . .	3	304.61	255.93	-48.68	-15.96
Crayons, pencils, crucibles, etc., . . . . .	3	284.81	249.89	-34.92	-12.26
Drugs and medicines, . . . . .	23	302.16	295.33	-6.83	-2.26
Dyestuffs, . . . . .	5	272.53	252.01	-20.52	-7.53
Earthen, plaster, and stone ware, . . . . .	7	288.63	277.30	-11.33	-3.93
Electrical apparatus and appliances, . . . . .	15	305.74	266.77	-38.97	-12.75
Electroplating, . . . . .	9	290.57	278.96	-11.61	-4.00
Emery and sand paper and cloth, etc., . . . . .	10	299.48	264.78	-34.70	-11.59
Fancy articles, etc., . . . . .	5	292.24	281.06	-11.18	-3.83
Fertilizers, . . . . .	5	305.09	302.90	-2.19	-0.72

DAYS IN OPERATION: BY INDUSTRIES — 1892, 1893  
— Concluded.

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGE NUMBER OF DAYS IN OPERATION		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Days	Percent- ages
Fine arts and taxidermy, . . . . .	8	303.50	305.00	+1.50	+0.49
Flax, hemp, jute, and linen goods, . . .	7	296.80	259.72	—39.08	—13.08
Food preparations, . . . . .	300	304.42	298.64	—5.78	—1.90
Furniture, . . . . .	121	297.67	286.37	—11.30	—3.80
Glass, . . . . .	8	294.11	242.32	—51.79	—17.61
Glue, isinglass, and starch, . . . . .	18	284.06	282.85	—1.21	—0.52
Hair work (animal and human), . . . .	9	299.02	278.00	—21.02	—7.08
Hose: rubber, linen, etc., . . . . .	8	295.21	274.42	—20.79	—7.04
Hosiery and knit goods, . . . . .	42	299.38	281.44	—17.94	—5.99
Ink, mucilage, and paste, . . . . .	9	302.60	291.65	—10.95	—3.62
Ivory, bone, shell, and horn goods, etc, .	10	289.06	277.86	—11.20	—3.87
Leather, . . . . .	148	294.12	279.04	—15.08	—5.13
Liquors and beverages (not spirituous), .	28	303.25	302.11	—1.14	—0.38
Liquors: malt, distilled, and fermented, .	53	301.83	301.27	—0.56	—0.19
Lumber, . . . . .	21	300.60	255.65	—44.95	—14.95
Machines and machinery, . . . . .	335	303.51	286.00	—16.91	—5.57
Metals and metallic goods, . . . . .	341	292.02	266.52	—25.50	—8.73
Mixed textiles, . . . . .	13	298.85	285.56	—13.29	—4.45
Models, lasts, and patterns, . . . . .	46	289.97	286.77	—3.20	—1.10
Musical instruments and materials, . . .	54	298.19	261.84	—33.35	—11.18
Oils and illuminating fluids, . . . . .	10	306.17	305.73	—0.44	—0.14
Paints, colors, and crude chemicals, . .	20	295.77	281.61	—14.16	—4.79
Paper and paper goods, . . . . .	98	289.99	276.52	—13.47	—4.64
Perfumes, toilet articles, etc., . . . .	5	303.86	289.18	—14.68	—4.83
Photographs and photographic materials,	17	304.22	301.32	—2.90	—0.95
Polishes and dressing, . . . . .	29	294.48	286.08	—8.40	—2.85
Printing, publishing, and bookbinding, .	34	305.14	303.01	—2.13	—0.70
Print works, dye works, and bleacheries,	44	300.13	266.82	—33.31	—11.10
Railroad construction and equipment, .	14	300.63	291.64	—8.99	—2.99
Rubber and elastic goods, . . . . .	34	281.15	284.55	+3.40	+1.21
Saddlery and harness, . . . . .	38	303.55	296.37	—7.18	—2.37
Scientific instruments and appliances, .	15	301.22	289.49	—11.73	—3.89
Shipbuilding, . . . . .	56	295.98	293.40	—2.58	—0.87
Silk and silk goods, . . . . .	12	300.71	261.73	—38.98	—12.96
Sporting and athletic goods, . . . . .	7	308.31	289.93	—22.38	—7.33
Stone, . . . . .	175	274.26	283.07	+8.81	+3.21
Straw and palm leaf goods, . . . . .	20	267.27	264.26	—3.01	—1.13
Tallow, candles, soap, and grease, . .	62	298.43	287.41	—11.02	—3.69
Tobacco, snuff, and cigars, . . . . .	42	297.41	290.41	—7.00	—2.35
Toys and games (children's), . . . . .	8	297.46	282.94	—14.52	—4.88
Trunks and valises, . . . . .	7	306.00	279.56	—26.44	—8.64
Whips, lashes, and stocks, . . . . .	10	300.53	245.79	—54.79	—18.23
Wooden goods, . . . . .	168	295.12	281.04	—14.08	—4.77
Woollen goods, . . . . .	125	299.29	262.37	—36.92	—12.34
Worsted goods, . . . . .	20	303.61	277.96	—25.65	—8.45
ALL INDUSTRIES, . . . . .	4,397	297.83	277.36	—20.47	—6.87



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**STATISTICS OF MANUFACTURES.**  
**INDUSTRY PRESENTATIONS.**

**1892, 1893.**

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## NOTES.

The following explanatory notes should be read in connection with the tables to which they refer:

## ESTABLISHMENTS, PARTNERS, ETC.

There are duplications in the lines devoted to "number of private firms," "partners," "number of corporations," and "stockholders." They are caused by the fact that the same firm or corporation is often engaged in manufacturing in two or more establishments located in different towns and sometimes in different industries. The plan adopted has been to consider each establishment (whether managed in connection with another or not) as one, and to credit the whole number of firms, partners, corporations, and stockholders to each industry, but to count them once only in making up the total for the presentation "All Industries." The industries in which these duplications appear can be ascertained by reference to the tables on pages 4 to 11.

## CAPITAL INVESTED.

In this presentation, the figures given against "Amount of capital invested" represent the returns made by the same establishments for each of the years given. Comparison is made, as regards the amount of capital invested between these two years. The relative increase or decrease in the later year as compared with the earlier year is given in amounts and percentages.

## STOCK USED.

In this presentation, the figures given against "Total value of stock used" represent the returns made by the same establishments for each of the years given. Comparison is made between the value of stock used in each of these two years. The relative increase or decrease in the later year as compared with the earlier year is given in amounts and percentages. In the case of Boots and Shoes, Carpetings, Cotton Goods, Leather, Machines and Machinery, Metals and Metallic Goods, Paper and Paper Goods, Woollen Goods, and Worsted Goods a detailed classification of articles of stock used by name is given. This classification is divided into three sections; in the first is shown the total value of the stock used during each of the two years in the establishments considered, with such classification by name as is possible and with the relative increase or decrease in the later year as compared with the earlier year expressed in amounts and percentages. In the second section will be found the *aggregate quantity* of each specified article of stock used as returned by these same establishments, together with the relative increase or decrease expressed in quantities and percentages. In the third section the *average value* per basis of each specified article of stock used is given with the increase or decrease therein expressed in amounts and percentages. The quantity of stock presented does not, in any instance, represent the total quantity used in any given industry. The figures are derived solely from the returns of those establishments which reported both quantity and value in each year, upon the same basis, thus admitting of direct comparison. Those establishments which failed to give detail in either or both years are included in the line "Not classified in detail." To avoid the use of small figures the units of measurement returned by the manufacturers have been increased when necessary; as, for instance, single pounds have been increased to 100 pounds or to tons, single feet to 1,000 feet, single yards to 100 yards, etc. The price per single pound, single foot, single yard, etc., may be readily obtained by dividing the figures given by 100, 1,000, etc.

## GOODS MADE.

In this presentation, the figures given against "Total value of goods made and work done," represent the returns made by the same establishments for each of the years given. Comparison is made between the value of goods made and work done in each of these two years. The relative increase or decrease in the later year as compared with the earlier year is given in amounts and percentages. In the case of Boots and Shoes, Carpetings, Cotton Goods, Leather, Machines and Machinery, Metals and Metallic Goods, Paper and Paper Goods, Woollen Goods, and Worsted Goods a detailed classification of articles of goods made by name is given. This classification is divided into three sections; in the first is shown the total value of goods made

and work done during each of the two years by the establishments considered, with such classification by name as is possible, and with the relative increase or decrease in the later year as compared with the earlier year expressed in amounts and percentages. In the second section will be found the *aggregate quantity* of each specified article as returned by those same establishments, together with the relative increase or decrease expressed in quantities and percentages. In the third section the *average value per basis* of each specified article of goods made is given with the increase or decrease therein expressed in amounts and percentages. The quantity or value of goods made does not, in any instance, represent the total amount or value manufactured in the State. The figures are derived solely from the returns of those establishments which reported both quantity and value in each year, upon the same basis, thus admitting of direct comparison. Those establishments which failed to give detail in either or both years are included in the line "Not classified in detail." To avoid the use of small figures the units of measurement returned by the manufacturers have been increased when necessary; as, for instance, single pounds have been increased to 100 pounds or to tons, single feet to 1,000 feet, single yards to 100 yards, etc. The price per single pound, single foot, single yard, etc., may be readily obtained by dividing the figures given by 100, 1,000, etc.

#### PERSONS EMPLOYED.

This presentation is divided into two sections. In the first is shown the aggregate average number of persons employed, the aggregate number of persons employed at periods of employment of the smallest number, the aggregate number of persons employed at periods of employment of the greatest number, and the excess of greatest over smallest number. By the terms "Periods of employment of smallest number" and "Periods of employment of greatest number" are meant those times, *as regards aggregate number of persons employed*, when the smallest or greatest number, respectively, was employed. The relative increase or decrease, expressed in amounts and percentages, is also given for one year as compared with the other. In the second section is shown the aggregate number of persons employed, by sex, during each month of the two years specified. It must be borne in mind that the number of persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.

#### WAGES AND EARNINGS.

In this presentation is shown the total amount paid in wages to all wage earners employed for each of the two years, the average yearly earnings per individual without regard to sex or age, and the relative increases or decreases in one year as compared with the other, expressed in amounts and percentages. The average yearly earnings have been obtained by dividing the sum of the total amount paid in wages by the figures representing the average number of persons employed. In this section is also shown the classified weekly wages paid to employes, ranging from under \$5 per week to \$20 per week and over, and the number of males and females receiving such wage. The returns were made by manufacturers to cover the week during which the largest number of persons was employed. It must be borne in mind that these figures represent the sums paid to wage earners only and do not include amounts paid to officers, clerks, or other salaried persons.

#### PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.

In this presentation is shown the average proportion of business done and the average number of days in operation. Greatest capacity, or maximum production, has been considered 100 per cent, and the percentages given indicate the average proportion of business done by each establishment during each year on the basis stated. The average number of days in operation is based upon the average number of persons employed, the number of days worked in each establishment being multiplied by the figures representing the average number of persons, and the sum divided by the aggregate number of persons, thus obtaining an average for each industry and for "All Industries." The relative increase or decrease in the later year as compared with the earlier year is given with its equivalent percentage.

**AGRICULTURAL IMPLEMENTS. 1892, 1893.****ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	11	11	=	=
Number of private firms, . . . . .	6	6	=	=
Number of partners, . . . . .	8	8	=	=
Males, . . . . .	8	8	=	=
Number of corporations, . . . . .	5	5	=	=
Number of stockholders, . . . . .	87	90	+3	+3.45
Males, . . . . .	65	68	+3	+4.62
Females, . . . . .	21	21	=	=
Banks, trustees, etc., . . . . .	1	1	=	=
Aggregates: partners and stockholders, .	95	98	+3	+3.16

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$1,395,811	\$1,344,889	—\$50,922	—3.66

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$571,330	\$542,104	—\$29,226	—5.12

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,212,890	\$1,141,502	—\$71,388	—5.89

AGRICULTURAL IMPLEMENTS — 1892, 1893 — Continued.

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	662	636	—26	—3.93
Smallest number, . . . . .	586	540	—46	—7.85
Greatest number, . . . . .	745	707	—38	—5.10
Excess of greatest over smallest number, .	159	167	+8	+5.03

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	669	—	669	679	—	679
February, . . . . .	681	—	681	692	—	692
March, . . . . .	700	—	700	697	—	697
April, . . . . .	692	—	692	686	—	686
May, . . . . .	688	—	688	654	—	654
June, . . . . .	673	—	673	634	—	634
July, . . . . .	653	—	653	601	—	601
August, . . . . .	594	—	594	543	—	543
September, . . . . .	606	—	606	580	—	580
October, . . . . .	634	—	634	607	—	607
November, . . . . .	646	—	646	619	—	619
December, . . . . .	601	—	601	644	—	644

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$353,854	\$325,434	—\$28,450	—8.04
Average yearly earnings, . . . . .	534.57	511.69	—22.88	—4.28



## AGRICULTURAL IMPLEMENTS — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	11	-	11	19	-	19
\$5 but under \$6, . . . .	14	-	14	20	-	20
\$6 but under \$7, . . . .	11	-	11	30	-	30
\$7 but under \$8, . . . .	79	-	79	93	-	93
\$8 but under \$9, . . . .	120	-	120	75	-	75
\$9 but under \$10, . . . .	132	-	132	96	-	96
\$10 but under \$12, . . . .	136	-	136	155	-	155
\$12 but under \$15, . . . .	120	-	120	123	-	123
\$15 but under \$20, . . . .	79	-	79	76	-	76
\$20 and over, . . . . .	17	-	17	18	-	18
TOTALS, . . . . .	719	-	719	710	-	710

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	63.55	58.00	-5.55	-8.73
Average number of days in operation, . . .	292.72	280.05	-12.67	-4.33

## ARMS AND AMMUNITION. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	13	13	=	=
Number of private firms, . . . . .	8	8	=	=
Number of partners, . . . . .	13	13	=	=
Males, . . . . .	12	12	=	=
Females, . . . . .	-	1	+1	.
Special, . . . . .	1	-	-1	-100.00
Number of corporations, . . . . .	5	5	=	=
Number of stockholders, . . . . .	129	131	+2	+1.55
Males, . . . . .	102	94	-8	-7.84
Females, . . . . .	26	26	=	=
Banks, trustees, etc., . . . . .	1	11	+10	+1,000.00
Aggregates: partners and stockholders, . .	142	144	+2	+1.41

ARMS AND AMMUNITION — 1892, 1893 — Continued.

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . .	\$4,720,960	\$4,813,121	+\$92,161	+1.95

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . .	\$584,960	\$569,129	—\$15,821	—2.70

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,476,658	\$2,199,083	+\$722,425	+48.92

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	2,131	2,006	—125	—5.87
Smallest number, . . . . .	2,032	1,565	—467	—22.98
Greatest number, . . . . .	2,336	2,343	+7	+0.30
Excess of greatest over smallest number, .	304	778	+474	+155.92

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	1,973	166	2,129	2,023	198	2,221
February, . . . . .	1,969	163	2,122	2,036	194	2,229
March, . . . . .	2,027	156	2,182	2,047	190	2,237
April, . . . . .	2,044	148	2,192	2,024	153	2,177
May, . . . . .	2,049	167	2,216	1,969	172	2,131

## ARMS AND AMMUNITION — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
June, . . . . .	2,026	174	2,200	1,818	162	1,980
July, . . . . .	1,647	170	1,817	1,594	153	1,747
August, . . . . .	1,657	188	1,845	1,723	157	1,880
September, . . . . .	2,042	188	2,230	1,633	177	1,810
October, . . . . .	2,025	197	2,222	1,677	180	1,857
November, . . . . .	2,032	182	2,214	1,703	191	1,894
December, . . . . .	2,030	170	2,200	1,708	193	1,901

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,276,524	\$1,145,461	—\$131,063	—10.27
Average yearly earnings, . . . . .	599.03	571.02	—28.01	—4.68

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	155	21	176	183	—	183
\$5 but under \$6, . . . . .	69	21	90	52	3	55
\$6 but under \$7, . . . . .	98	19	117	109	17	126
\$7 but under \$8, . . . . .	80	32	112	109	14	123
\$8 but under \$9, . . . . .	89	47	136	132	19	151
\$9 but under \$10, . . . . .	171	32	203	191	52	243
\$10 but under \$12, . . . . .	277	18	295	265	69	334
\$12 but under \$15, . . . . .	374	3	377	327	30	357
\$15 but under \$20, . . . . .	674	—	674	611	—	611
\$20 and over, . . . . .	127	—	127	159	—	159
TOTALS, . . . . .	2,114	193	2,307	2,138	204	2,342

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	63.85	54.77	—9.08	—14.22
Average number of days in operation, . . . . .	291.10	283.28	—7.82	—2.69

ARTISANS' TOOLS. 1892, 1893.  
ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . . . .	65	65	=	=
Number of private firms, . . . . .	54	54	=	=
Number of partners, . . . . .	76	76	=	=
Males, . . . . .	73	73	=	=
Females, . . . . .	3	2	-1	-33.33
Estates, . . . . .	-	1	+1	-
Number of corporations, . . . . .	11	11	=	=
Number of stockholders, . . . . .	645	690	+45	+6.98
Males, . . . . .	356	383	+27	+7.58
Females, . . . . .	235	242	+7	+2.98
Banks, trustees, etc., . . . . .	54	65	+11	+20.37
Aggregates : partners and stockholders, . . . . .	721	766	+45	+6.24

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$2,780,126	\$3,154,630	+\$374,504	+13.47

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$743,569	\$792,223	+\$48,659	+6.54

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, . . . . .	\$2,735,781	\$2,620,834	-\$114,947	-4.20

## ARTISANS' TOOLS — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	1,809	1,670	-139	-7.68
Smallest number, . . . . .	1,680	1,315	-365	-21.73
Greatest number, . . . . .	1,936	1,934	-2	-0.10
Excess of greatest over smallest number, .	256	619	+363	+141.80

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	1,717	60	1,777	1,724	54	1,778
February, . . . . .	1,753	61	1,814	1,734	52	1,786
March, . . . . .	1,758	59	1,817	1,779	55	1,834
April, . . . . .	1,758	65	1,823	1,796	59	1,855
May, . . . . .	1,764	68	1,832	1,786	60	1,846
June, . . . . .	1,731	63	1,794	1,751	60	1,811
July, . . . . .	1,732	61	1,793	1,564	56	1,620
August, . . . . .	1,695	59	1,754	1,483	46	1,529
September, . . . . .	1,724	58	1,782	1,489	49	1,538
October, . . . . .	1,724	63	1,787	1,433	48	1,481
November, . . . . .	1,748	63	1,811	1,374	49	1,423
December, . . . . .	1,763	61	1,824	1,362	47	1,409
During the entire year,* . . . . .	127	2	129	42	-	42

\* 20 establishments in 1892; 11 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$969,087	\$881,635	-\$87,452	-9.02
Average yearly earnings, . . . . .	535.70	527.96	-7.74	-1.44

## ARTISANS' TOOLS — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	127	23	150	90	7	97
\$5 but under \$6, . . . . .	44	14	58	79	8	87
\$6 but under \$7, . . . . .	95	12	107	81	9	90
\$7 but under \$8, . . . . .	100	15	115	114	13	127
\$8 but under \$9, . . . . .	114	3	117	132	6	138
\$9 but under \$10, . . . . .	259	-	259	218	6	219
\$10 but under \$12, . . . . .	260	1	261	332	3	335
\$12 but under \$15, . . . . .	339	-	339	400	-	400
\$15 but under \$20, . . . . .	310	1	311	306	-	306
\$20 and over, . . . . .	109	-	109	99	1	100
TOTALS, . . . . .	1,798	69	1,867	1,846	53	1,899

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	65.90	55.98	-9.82	-14.92
Average number of days in operation, . . .	295.98	275.17	-20.81	-7.03

## AWNINGS, SAILS, TENTS, ETC. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	39	39	=	=
Number of private firms, . . . . .	39	39	=	=
Number of partners, . . . . .	52	54	+2	+3.85
Males, . . . . .	52	53	+1	+1.92
Females, . . . . .	-	1	+1	-

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$181,925	\$168,007	-\$13,918	-7.65

## AWNINGS, SAILS, TENTS, ETC. — 1892, 1893 — Continued.

## STOCK USED. AGGREGATE VALUES.

Stock Used.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$320,320	\$230,511	—\$89,809	—28.04

## GOODS MADE. AGGREGATE VALUES.

Goods Made.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$552,524	\$451,397	—\$101,127	—18.30

## PERSONS EMPLOYED.

Persons Employed.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	193	189	—4	—2.07
Smallest number, . . . . .	130	123	—7	—5.38
Greatest number, . . . . .	296	284	—12	—4.05
Excess of greatest over smallest number, .	166	161	—5	—3.01

## PERSONS EMPLOYED: BY MONTHS.

Months.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	124	30	154	129	19	148
February, . . . . .	128	35	163	126	25	151
March, . . . . .	138	37	175	150	34	184
April, . . . . .	163	46	209	150	42	192
May, . . . . .	175	51	226	153	50	203
June, . . . . .	168	54	222	158	52	210
July, . . . . .	156	49	205	162	46	208

AWNINGS, SAILS, TENTS, ETC. — 1892, 1893 — Concluded.

PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	159	37	196	150	36	186
September, . . . . .	154	35	189	170	27	197
October, . . . . .	160	33	193	162	21	183
November, . . . . .	160	28	188	151	18	169
December, . . . . .	143	29	177	143	14	157
During the entire year,* . .	27	11	38	17	10	27

\* 5 establishments in 1892; 2 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$106,957	\$107,768	—\$1,189	—1.09
Average yearly earnings, . . . . .	564.54	570.20	+\$5.66	+1.00

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	9	3	12	6	2	8
\$5 but under \$6, . . . . .	5	5	10	4	1	5
\$6 but under \$7, . . . . .	3	9	12	3	12	15
\$7 but under \$8, . . . . .	5	8	13	4	8	12
\$8 but under \$9, . . . . .	2	24	26	2	15	17
\$9 but under \$10, . . . . .	6	—	6	5	4	9
\$10 but under \$12, . . . . .	12	4	16	14	2	16
\$12 but under \$15, . . . . .	31	1	32	29	—	29
\$15 but under \$20, . . . . .	163	—	163	165	—	165
\$20 and over, . . . . .	1	—	1	3	—	3
TOTALS, . . . . .	237	54	291	235	44	279

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	41.92	37.10	—4.82	11.50
Average number of days in operation, . .	280.17	279.99	—0.18	0.06



## BOOTS AND SHOES. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	712	712	=	=
Number of private firms, . . . . .	672	667	-5	-0.74
Number of partners, . . . . .	1,104	1,086	-18	-1.63
Males, . . . . .	1,070	1,052	-18	-1.68
Females, . . . . .	11	10	-1	-9.09
Special, . . . . .	22	18	-4	-18.18
Estates, . . . . .	1	6	+5	+500.00
Number of corporations, . . . . .	40	45	+5	+12.50
Number of stockholders, . . . . .	357	393	+36	+10.08
Males, . . . . .	321	353	+32	+9.97
Females, . . . . .	36	37	+1	+2.78
Banks, trustees, etc., . . . . .	-	3	+3	-
Aggregates: partners and stockholders, . .	1,461	1,479	+18	+1.23

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$29,067,583	\$29,303,026	+\$235,443	+0.81

## STOCK USED. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$62,667,535	\$55,023,688	-\$7,633,847	-12.19
Leather, scrap . . . . .	589,887	438,209	-151,618	-25.70
Leather, sole . . . . .	11,058,544	9,172,325	-1,886,219	-17.06
Leather, upper . . . . .	11,509,649	10,131,436	-1,378,213	-11.97
Leather (not specified) . . . . .	1,240,432	892,474	-347,958	-28.05
Leather-board, . . . . .	68,667	57,973	-10,694	-15.57
Soles, cut . . . . .	618,416	478,217	-140,199	-22.67
Not classified in detail, . . . . .	37,581,940	33,857,994	-3,723,946	-9.91

## BOOTS AND SHOES — 1892, 1893 — Continued.

## STOCK USED. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measurement	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Quantities	Percentages
Leather:					
Scrap, . . . . .	tons	8,514½	7,525½	-999½	-11.62
Sole, . . . . .	100 pounds	462,388	405,360	-57,028	-12.33
Sole, . . . . .	sides	997,132	771,469	-225,663	-22.63
Upper, . . . . .	100 feet	696,959	617,000	-79,959	-11.47
Upper, . . . . .	100 pounds	91,833	89,621	-2,212	-2.41
Leather (not specified), . . . . .	100 pounds	121,270	88,756	-32,514	-26.81
Leather-board, . . . . .	tons	1,030½	955½	-75	-7.28
Soles, cut . . . . .	100 pairs	57,764	49,244	-8,520	-14.75

## STOCK USED. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measurement	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percentages
Leather:					
Scrap, . . . . .	tons	\$69.28	\$58.24	-\$11.04	-15.94
Sole, . . . . .	100 pounds	17.77	17.26	-0.51	-2.87
Sole, . . . . .	sides	2.85	2.82	-0.03	-1.05
Upper, . . . . .	100 feet	13.07	12.89	-0.18	-1.37
Upper, . . . . .	100 pounds	26.14	24.30	-1.84	-7.04
Leather (not specified), . . . . .	100 pounds	10.23	10.06	-0.17	-1.66
Leather-board, . . . . .	tons	66.65	60.69	-5.96	-8.94
Soles, cut . . . . .	100 pairs	10.71	9.71	-1.00	-9.34

## GOODS MADE. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percentages
Total value of goods made and work done, .	\$103,878,098	\$92,740,686	-\$11,137,412	-10.72
Boots:				
Boys', . . . . .	70,631	44,999	-25,632	-36.29
Children's, . . . . .	33,540	34,943	+1,403	+4.18
Men's, . . . . .	1,396,020	1,099,247	-296,773	-21.26
Misses', . . . . .	42,920	54,866	+11,946	+27.83
Women's, . . . . .	1,208,291	1,159,019	-49,272	-4.08
Youths', . . . . .	23,484	27,700	+4,216	+17.95
Boots (not specified), . . . . .	628,622	372,131	-256,491	-40.80

## BOOTS AND SHOES — 1892, 1893 — Continued.

## GOODS MADE. AGGREGATE VALUES — Concluded.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
<b>Boots and shoes:</b>				
Boys', . . . . .	\$1,689,441	\$1,431,469	—\$257,972	—15.27
Children's, . . . . .	1,541,190	1,429,194	—111,996	—7.27
Infants', . . . . .	43,928	63,325	+19,397	+44.16
Men's, . . . . .	16,670,616	15,937,442	—733,174	—4.40
Misses', . . . . .	925,802	895,186	—30,616	—3.31
Women's, . . . . .	4,798,955	4,560,590	—238,375	—4.97
Youths', . . . . .	785,161	695,745	—89,416	—11.39
Boots and shoes (not specified), . .	12,257,380	11,222,110	—1,035,270	—8.45
<b>Shoes:</b>				
Boys', . . . . .	846,721	811,480	—35,241	—10.16
Children's, . . . . .	512,954	457,467	—55,487	—10.82
Infants', . . . . .	31,759	50,920	+19,161	+60.33
Low cut (misses'), . . . . .	27,214	36,500	+9,286	+34.12
Low-cut (women's), . . . . .	817,457	728,307	—89,150	—10.91
Low-cut (not specified), . . . . .	1,137,169	1,086,322	—50,847	—4.47
Men's, . . . . .	5,106,353	4,279,160	—827,193	—16.20
Misses', . . . . .	829,066	287,550	—41,516	—12.62
Women's, . . . . .	3,504,598	3,409,299	—95,299	—2.72
Youths', . . . . .	81,567	76,712	—4,855	—5.95
Shoes (not specified), . . . . .	10,085,174	9,527,490	—557,684	—5.06
<b>Slippers:</b>				
Men's, . . . . .	479,007	368,578	—110,429	—23.05
Women's, . . . . .	671,985	627,911	—44,074	—6.56
Slippers (not specified), . . . . .	1,922,513	1,628,217	—294,296	—15.31
Not classified in detail, . . . . .	36,758,580	30,836,817	—5,921,763	—16.11

## GOODS MADE. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Quantities	Percent- ages
<b>Boots:</b>					
Boys', . . . . .	pairs	46,971	31,728	—15,243	—32.45
Children's, . . . . .	pairs	44,055	44,671	+616	+1.40
Men's, . . . . .	pairs	593,004	530,255	—62,749	—10.58
Misses', . . . . .	pairs	40,434	45,700	+5,266	+13.02
Women's, . . . . .	pairs	1,008,972	1,045,137	+36,165	+3.58
Youths', . . . . .	pairs	19,628	23,000	+3,372	+17.18
Boots (not specified), . . . . .	pairs	429,062	275,574	—153,488	—35.77
<b>Boots and shoes:</b>					
Boys', . . . . .	pairs	1,531,636	1,406,546	—125,090	—8.17
Children's, . . . . .	pairs	2,761,944	2,667,066	—94,878	—3.44
Infants', . . . . .	pairs	71,011	83,610	+12,599	+17.74
Men's, . . . . .	pairs	9,788,916	9,611,617	—177,299	—1.81
Misses', . . . . .	pairs	1,362,909	1,365,644	+2,735	+0.20

**BOOTS AND SHOES — 1892, 1893 — Continued.**  
**GOODS MADE. AGGREGATE QUANTITIES — Concluded.**

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Quantities	Percent- ages
Boots and shoes : — Con.					
Women's, . . . . .	pairs	4,279,859	4,033,112	—246,747	—5.77
Youths', . . . . .	pairs	901,441	809,356	—92,085	—10.22
Boots and shoes (not speci- fied), . . . . .	pairs	10,670,819	9,898,782	—772,037	—7.24
Shoes :					
Boys', . . . . .	pairs	353,272	337,035	—16,237	—4.60
Children's, . . . . .	pairs	1,137,269	977,266	—160,003	—14.07
Infants', . . . . .	pairs	136,656	233,886	+97,230	+71.15
Low-cut (misses'), . . . . .	pairs	50,007	58,000	+7,993	+15.98
Low-cut (women's), . . . . .	pairs	765,106	747,910	—17,196	—2.25
Low-cut (not specified), . . . . .	pairs	1,204,808	1,228,999	+24,191	+2.01
Men's, . . . . .	pairs	2,378,721	2,508,197	—370,524	—12.87
Misses', . . . . .	pairs	333,838	337,743	—4,095	—12.01
Women's, . . . . .	pairs	3,030,216	3,073,659	+43,443	+1.43
Youths', . . . . .	pairs	85,572	76,919	—8,653	—10.11
Shoes (not specified), . . . . .	pairs	7,307,161	6,745,581	—561,580	—7.69
Slippers :					
Men's, . . . . .	pairs	646,653	496,411	—150,242	—23.23
Women's, . . . . .	pairs	1,080,822	1,013,373	—67,449	—6.24
Slippers (not specified), . . . . .	pairs	2,454,400	2,122,932	—331,468	—13.51

**GOODS MADE. AVERAGE VALUES.**

CLASSIFICATION.	Basis of Measure- ment	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Boots:					
Boys', . . . . .	pairs	\$1.50	\$1.42	—\$0.08	—5.33
Children's, . . . . .	pairs	0.76	0.78	+0.02	+2.63
Men's, . . . . .	pairs	2.35	2.07	—0.28	—11.91
Misses', . . . . .	pairs	1.06	1.20	+0.14	+13.21
Women's, . . . . .	pairs	1.20	1.11	—0.09	—7.50
Youths', . . . . .	pairs	1.20	1.20	*=	*=
Boots (not specified), . . . . .	pairs	1.47	1.35	—0.12	—8.16
Boots and shoes:					
Boys', . . . . .	pairs	1.10	1.02	—0.08	—7.27
Children's, . . . . .	pairs	0.56	0.54	—0.02	—3.57
Infants', . . . . .	pairs	0.62	0.76	+0.14	+22.58
Men's, . . . . .	pairs	1.70	1.66	—0.04	—2.35
Misses', . . . . .	pairs	0.68	0.66	—0.02	—2.94
Women's, . . . . .	pairs	1.12	1.13	+0.01	+0.89
Youths', . . . . .	pairs	0.87	0.86	—0.01	—1.15
Boots and shoes (not speci- fied), . . . . .	pairs	1.15	1.13	—0.02	—1.74

\* No change in average values.

## BOOTS AND SHOES — 1892, 1893 — Continued.

## GOODS MADE. AVERAGE VALUES — Concluded.

CLASSIFICATION.	Basis of Measure- ment	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1903	
		1892	1893	Amounts	Percent- ages
Shoes :					
Boys' . . . . .	pairs	\$0.98	\$0.92	—0.06	—6.12
Children's, . . . . .	pairs	0.45	0.47	+0.02	+4.44
Infants', . . . . .	pairs	0.23	0.22	—0.01	—4.35
Low-cut (misses'), . . . . .	pairs	0.54	0.63	+0.09	+16.67
Low-cut (women's), . . . . .	pairs	1.07	0.97	—0.10	—9.35
Low-cut (not specified), . . . . .	pairs	0.94	0.88	—0.06	—6.38
Men's, . . . . .	pairs	1.77	1.71	—0.06	—3.39
Misses', . . . . .	pairs	0.86	0.85	—0.01	—1.16
Women's, . . . . .	pairs	1.16	1.11	—0.05	—4.31
Youths', . . . . .	pairs	0.95	1.00	+0.05	+5.26
Shoes (not specified), . . . . .	pairs	1.37	1.41	+0.04	+2.92
Slippers :					
Men's, . . . . .	pairs	0.74	0.74	*=	*=
Women's, . . . . .	pairs	0.62	0.62	*=	*=
Slippers (not specified), . . . . .	pairs	0.78	0.77	—0.01	—1.28

\* No change in average values.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percentages
Average number, . . . . .	48,859	45,389	—3,470	—7.10
Smallest number, . . . . .	40,761	34,039	—6,722	—16.49
Greatest number, . . . . .	56,611	55,665	—946	—1.67
Excess of greatest over smallest number, . . . . .	15,850	21,626	+5,776	+36.44

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	32,641	13,867	46,508	33,864	15,033	48,902
February, . . . . .	33,345	14,215	47,560	34,319	15,339	49,658
March, . . . . .	33,855	14,292	48,147	34,978	15,617	50,595
April, . . . . .	33,913	14,436	48,349	34,720	15,564	50,284
May, . . . . .	34,577	14,631	49,208	34,563	15,523	50,086
June, . . . . .	34,613	14,701	49,314	33,003	14,699	47,702
July, . . . . .	34,544	14,654	49,198	29,940	12,920	42,860

BOOTS AND SHOES — 1892, 1893 — Concluded.  
PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	35,234	14,988	50,172	28,685	12,167	40,852
September, . . . . .	35,294	14,903	50,197	28,488	12,147	40,635
October, . . . . .	34,893	14,961	49,854	28,890	12,297	40,697
November, . . . . .	34,091	14,601	48,692	27,871	12,140	40,011
December, . . . . .	33,882	14,459	48,341	28,387	12,283	40,670
During the entire year,* . .	6,819	2,647	8,966	2,591	1,105	3,696

\* 204 establishments in 1892; 100 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$25,533,508	\$22,618,509	—\$2,914,939	—11.42
Average yearly earnings, . . . . .	522.60	493.88	—28.72	—5.50

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	1,840	2,779	4,619	1,828	2,804	4,632
\$5 but under \$6, . . . . .	1,232	1,702	2,934	1,143	1,709	2,852
\$6 but under \$7, . . . . .	1,813	1,918	3,731	1,876	2,071	3,947
\$7 but under \$8, . . . . .	2,037	2,076	4,113	1,964	2,064	4,028
\$8 but under \$9, . . . . .	1,997	1,824	3,821	2,125	1,913	4,038
\$9 but under \$10, . . . . .	3,259	1,948	5,207	3,224	1,911	5,135
\$10 but under \$12, . . . . .	5,265	2,173	7,438	5,134	2,234	7,368
\$12 but under \$15, . . . . .	9,466	1,582	11,048	8,696	1,465	10,161
\$15 but under \$20, . . . . .	7,805	724	8,529	7,461	604	8,065
\$20 and over, . . . . .	2,713	67	2,780	2,748	59	2,807
TOTALS, . . . . .	37,427	16,793	54,220	36,199	16,834	53,033

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	69.50	48.59	—20.91	—30.09
Average number of days in operation, . . .	293.56	274.41	—19.15	—6.52

**BOXES (PAPER AND WOODEN). 1892, 1893.****ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	136	136	=	=
Number of private firms, . . . . .	123	121	-2	-1.63
Number of partners, . . . . .	183	180	-3	-1.64
Males, . . . . .	180	175	-5	-2.78
Females, . . . . .	1	2	+1	+100.00
Special, . . . . .	2	3	+1	+50.00
Number of corporations, . . . . .	13	15	+2	+15.38
Number of stockholders, . . . . .	119	131	+12	+10.08
Males, . . . . .	66	110	+44	+66.67
Females, . . . . .	44	19	-25	-56.82
Banks, trustees, etc., . . . . .	9	2	-7	-77.78
Aggregates: partners and stockholders, .	302	311	+9	+2.98

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$2,429,760	\$2,606,756	+\$176,996	+7.28

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$2,602,582	\$2,374,105	-\$228,477	-8.75

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$4,811,881	\$4,439,942	-\$371,939	-7.73

## BOXES (PAPER AND WOODEN) — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	3,400	3,247	-153	-4.50
Smallest number, . . . . .	2,993	2,580	-413	-13.80
Greatest number, . . . . .	3,836	3,906	+70	+1.82
Excess of greatest over smallest number, .	843	1,326	+483	+57.80

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	1,927	1,387	3,314	1,974	1,484	3,458
February, . . . . .	1,971	1,388	3,359	1,979	1,479	3,458
March, . . . . .	1,992	1,391	3,383	2,038	1,545	3,583
April, . . . . .	2,010	1,416	3,426	2,069	1,558	3,627
May, . . . . .	2,020	1,402	3,422	2,046	1,515	3,561
June, . . . . .	1,990	1,375	3,365	2,023	1,476	3,499
July, . . . . .	1,960	1,377	3,337	1,892	1,275	3,167
August, . . . . .	1,943	1,414	3,357	1,735	1,187	2,922
September, . . . . .	1,836	1,411	3,247	1,693	1,146	2,839
October, . . . . .	1,994	1,463	3,457	1,718	1,178	2,896
November, . . . . .	2,016	1,464	3,480	1,711	1,202	2,913
December, . . . . .	2,026	1,496	3,522	1,721	1,187	2,908
During the entire year,* . . .	256	296	552	208	169	377

\* 26 establishments in 1892; 19 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,366,440	\$1,287,998	-\$78,442	-5.74
Average yearly earnings, . . . . .	401.89	396.67	-5.22	-1.30



## BOXES (PAPER AND WOODEN) — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	113	347	460	93	449	542
\$5 but under \$6, . . . . .	66	217	283	53	222	275
\$6 but under \$7, . . . . .	139	317	456	130	318	448
\$7 but under \$8, . . . . .	152	265	417	180	223	403
\$8 but under \$9, . . . . .	198	129	327	190	156	346
\$9 but under \$10, . . . . .	423	107	530	403	82	485
\$10 but under \$12, . . . . .	415	115	530	432	92	524
\$12 but under \$15, . . . . .	438	43	481	482	39	521
\$15 but under \$20, . . . . .	197	6	202	195	6	201
\$20 and over, . . . . .	31	-	31	33	-	33
TOTALS, . . . . .	2,172	1,545	3,717	2,191	1,587	3,778

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	69.41	59.83	-9.53	-13.73
Average number of days in operation, . . . . .	294.96	274.58	-20.38	-6.91

## BRICK, TILES, AND SEWER PIPE. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . . . .	49	49	=	=
Number of private firms, . . . . .	40	40	=	=
Number of partners, . . . . .	67	63	-4	-5.97
Males, . . . . .	62	58	-4	-6.45
Females, . . . . .	5	3	-2	-40.00
Special, . . . . .	-	1	+1	-
Estates, . . . . .	-	1	+1	-
Number of corporations, . . . . .	9	9	=	=
Number of stockholders, . . . . .	284	290	+6	+2.11
Males, . . . . .	216	218	+3	+1.40
Females, . . . . .	68	66	-2	-2.94
Banks, trustees, etc., . . . . .	1	6	+5	+500.00
Aggregates: partners and stockholders, . . . . .	351	353	+2	+0.57

## BRICK, TILES, AND SEWER PIPE—1892, 1893—Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$1,675,676	\$1,782,580	+\$106,904	+6.38

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$411,847	\$406,477	-\$5,370	-1.55

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,504,416	\$1,387,685	-\$116,731	-7.76

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	1,309	1,229	-80	-6.11
Smallest number, . . . . .	608	608	-90	-12.89
Greatest number, . . . . .	1,983	2,001	+18	+0.91
Excess of greatest over smallest number, .	1,285	1,393	+108	+8.40

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	673	4	677	634	4	638
February, . . . . .	671	4	675	633	4	637
March, . . . . .	701	4	705	715	5	720
April, . . . . .	1,872	4	1,876	1,242	5	1,247
May, . . . . .	1,814	4	1,818	1,801	5	1,806
June, . . . . .	1,875	3	1,878	1,852	5	1,857
July, . . . . .	1,857	3	1,860	1,852	4	1,856

## BRICK, TILES, AND SEWER PIPE — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	1,881	3	1,884	1,740	4	1,744
September, . . . . .	1,710	3	1,713	1,632	4	1,636
October, . . . . .	1,409	3	1,412	1,233	4	1,237
November, . . . . .	956	3	959	776	4	780
December, . . . . .	749	3	752	622	4	626
During the entire year,* . .	94	-	94	38	-	38

\* 3 establishments in 1892; 2 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$600,353	\$566,168	-\$34,185	-5.69
Average yearly earnings, . . . . .	458.63	460.67	+2.04	+0.44

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	42	3	45	42	1	43
\$5 but under \$6, . . . . .	15	6	21	33	1	34
\$6 but under \$7, . . . . .	81	-	81	91	1	92
\$7 but under \$8, . . . . .	129	-	129	115	-	115
\$8 but under \$9, . . . . .	353	-	353	274	-	274
\$9 but under \$10, . . . . .	548	-	548	509	-	509
\$10 but under \$12, . . . . .	491	-	491	520	-	520
\$12 but under \$15, . . . . .	170	-	170	194	-	194
\$15 but under \$20, . . . . .	115	-	115	113	-	113
\$20 and over, . . . . .	49	-	49	48	-	48
TOTALS, . . . . .	1,993	9	2,002	1,939	3	1,942

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	74.45	69.88	-4.57	-6.14
Average number of days in operation, . . .	238.23	231.46	-6.77	-2.84

**BROOMS, BRUSHES, AND MOPS. 1892, 1893.****ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	21	21	=	=
Number of private firms, . . . . .	19	19	=	=
Number of partners, . . . . .	34	32	-2	-5.88
Males, . . . . .	32	29	-3	-9.38
Females, . . . . .	2	2	=	=
Estates, . . . . .	-	1	+1	-
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	37	37	=	=
Males, . . . . .	23	22	-1	-4.35
Females, . . . . .	11	12	+1	+9.09
Banks, trustees, etc., . . . . .	3	3	=	=
Aggregates: partners and stockholders, .	71	69	-2	-2.82

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$813,644	\$814,729	+\$1,085	+0.13

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$842,082	\$826,831	-\$15,251	-1.81

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,476,365	\$1,424,790	-\$51,575	-3.49

## BROOMS, BRUSHES, AND MOPS — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	871	849	-22	-2.53
Smallest number, . . . . .	804	713	-91	-11.32
Greatest number, . . . . .	961	956	-5	-0.52
Excess of greatest over smallest number, .	157	243	+86	+54.78

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	452	413	865	473	447	920
February, . . . . .	448	413	861	474	441	915
March, . . . . .	457	424	881	479	440	919
April, . . . . .	453	426	879	470	442	912
May, . . . . .	443	428	869	455	423	878
June, . . . . .	436	426	862	447	434	881
July, . . . . .	438	415	853	430	395	825
August, . . . . .	431	417	848	391	374	765
September, . . . . .	440	423	863	391	364	755
October, . . . . .	451	423	879	414	399	813
November, . . . . .	452	425	877	412	394	806
December, . . . . .	457	437	894	408	376	784
During the entire year,* . .	259	198	457	251	196	447

\* 8 establishments in 1892; 6 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$320,167	\$306,018	-\$14,149	-4.42
Average yearly earnings, . . . . .	367.59	360.45	-7.14	-1.94

## BROOMS, BRUSHES, AND MOPS — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	75	235	310	74	238	312
\$5 but under \$6, . . . . .	38	106	144	37	95	132
\$6 but under \$7, . . . . .	30	65	104	28	56	84
\$7 but under \$8, . . . . .	23	24	47	27	29	56
\$8 but under \$9, . . . . .	19	16	35	20	10	30
\$9 but under \$10, . . . . .	32	7	39	35	11	46
\$10 but under \$12, . . . . .	45	8	53	38	8	46
\$12 but under \$15, . . . . .	32	5	37	33	4	37
\$15 but under \$20, . . . . .	95	2	97	97	2	99
\$20 and over, . . . . .	46	-	46	46	-	46
TOTALS, . . . . .	494	468	962	490	453	943

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	71.62	59.05	-12.57	-17.55
Average number of days in operation, . . .	303.27	291.37	-11.90	-3.92

BURIAL CASES, CASKETS, COFFINS, ETC.  
1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (-), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	6	6	=	=
Number of private firms, . . . . .	5	5	=	=
Number of partners, . . . . .	6	9	+3	+50.00
Males, . . . . .	6	9	+3	+50.00
Number of corporations, . . . . .	1	1	=	=
Number of stockholders, . . . . .	39	39	=	=
Males, . . . . .	29	29	=	=
Females, . . . . .	5	5	=	=
Banks, trustees, etc., . . . . .	5	5	=	=
Aggregates: partners and stockholders, . .	45	48	+3	+6.67

## BURIAL CASES, CASKETS, COFFINS, ETC. — 1892, 1893

— Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$358,009	\$298,263	—\$59,746	—16.69

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$193,735	\$196,521	+\$2,786	+1.44

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$319,750	\$328,675	+\$8,925	+2.79

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	185	188	+3	+1.62
Smallest number, . . . . .	181	172	—9	—4.97
Greatest number, . . . . .	188	201	+13	+6.91
Excess of greatest over smallest number, .	7	29	+22	+314.29

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	159	28	187	164	23	187
February, . . . . .	159	29	188	162	24	186
March, . . . . .	158	29	187	161	24	185
April, . . . . .	158	28	186	161	23	184
May, . . . . .	157	27	184	161	23	184
June, . . . . .	158	27	185	158	21	179
July, . . . . .	155	26	181	158	20	178

**BURIAL CASES, CASKETS, COFFINS, ETC. — 1892, 1893**  
— Concluded.

**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	157	29	186	166	21	187
September, . . . . .	155	28	183	174	25	199
October, . . . . .	157	28	185	174	24	198
November, . . . . .	156	27	183	176	24	200
December, . . . . .	158	28	186	171	18	189
During the entire year,* . .	136	25	161	33	4	37

\* 4 establishments in 1892; 3 establishments in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$100,484	\$102,136	+\$1,652	+1.64
Average yearly earnings, . . . . .	543.16	543.28	+0.12	+0.02

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	-	4	4	3	1	4
\$5 but under \$6, . . . . .	2	-	2	6	3	9
\$6 but under \$7, . . . . .	3	2	5	7	1	8
\$7 but under \$8, . . . . .	7	-	7	8	1	9
\$8 but under \$9, . . . . .	8	5	13	12	5	17
\$9 but under \$10, . . . . .	6	10	16	10	10	20
\$10 but under \$12, . . . . .	14	2	16	15	3	18
\$12 but under \$15, . . . . .	60	-	60	59	-	59
\$15 but under \$20, . . . . .	59	-	59	49	-	49
\$20 and over, . . . . .	5	-	5	6	-	6
TOTALS, . . . . .	164	23	187	175	24	199

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	82.17	82.33	+0.16	+0.19
Average number of days in operation, . .	306.13	304.35	-1.78	-0.58



**BUTTONS AND DRESS TRIMMINGS. 1892, 1893.**  
**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	19	19	=	=
Number of private firms, . . . . .	12	11	-1	-8.33
Number of partners, . . . . .	20	18	-2	-10.00
Males, . . . . .	19	17	-2	-10.53
Females, . . . . .	1	1	=	=
Number of corporations, . . . . .	7	8	+1	+14.29
Number of stockholders, . . . . .	83	93	+10	+12.05
Males, . . . . .	65	77	+12	+18.46
Females, . . . . .	18	14	-2	-12.50
Banks, trustees, etc., . . . . .	2	2	=	=
Aggregates: partners and stockholders, .	103	111	+8	+7.77

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$918,781	\$952,435	+\$33,654	+3.66

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$670,526	\$559,784	-\$110,742	-16.52

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,523,008	\$1,326,105	-\$196,903	-12.93

BUTTONS AND DRESS TRIMMINGS — 1892, 1893 — Continued.  
PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	1,253	1,090	—163	—13.01
Smallest number, . . . . .	1,050	688	—367	—34.95
Greatest number, . . . . .	1,442	1,460	+18	+1.25
Excess of greatest over smallest number, .	392	777	+385	+98.21

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	872	819	1,191	527	850	1,377
February, . . . . .	890	872	1,262	518	850	1,363
March, . . . . .	400	927	1,327	504	840	1,344
April, . . . . .	381	907	1,288	505	807	1,312
May, . . . . .	374	870	1,244	476	763	1,239
June, . . . . .	388	807	1,195	407	750	1,157
July, . . . . .	402	820	1,222	378	686	1,064
August, . . . . .	403	790	1,193	314	485	799
September, . . . . .	401	813	1,214	272	473	745
October, . . . . .	400	897	1,297	295	565	860
November, . . . . .	401	889	1,290	296	561	857
December, . . . . .	391	891	1,282	349	591	940
During the entire year,* . . . . .	18	27	45	—	—	—

\* 4 establishments in 1892.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$467,967	\$407,855	—\$60,112	—12.85
Average yearly earnings, . . . . .	873.48	874.18	+0.70	+0.19

**BUTTONS AND DRESS TRIMMINGS — 1892, 1893 — Concluded.**  
**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	59	308	367	72	305	377
\$5 but under \$6, . . . . .	42	340	382	39	335	374
\$6 but under \$7, . . . . .	38	140	178	31	130	161
\$7 but under \$8, . . . . .	52	80	132	62	77	139
\$8 but under \$9, . . . . .	35	32	67	32	27	59
\$9 but under \$10, . . . . .	65	24	89	56	15	71
\$10 but under \$12, . . . . .	93	7	100	68	1	69
\$12 but under \$15, . . . . .	89	2	91	107	1	108
\$15 but under \$20, . . . . .	71	1	72	75	1	76
\$20 and over, . . . . .	17	—	17	18	—	18
<b>TOTALS, . . . . .</b>	<b>561</b>	<b>934</b>	<b>1,495</b>	<b>560</b>	<b>892</b>	<b>1,452</b>

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	64.47	48.05	—16.42	—25.47
Average number of days in operation, . . .	298.74	269.33	—29.41	—9.84

**CARPETINGS. 1892, 1893.**  
**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (—), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	11	11	=	=
Number of private firms, . . . . .	4	4	=	=
Number of partners, . . . . .	4	5	+1	+25.00
Males, . . . . .	4	5	+1	+25.00
Number of corporations, . . . . .	7	7	=	=
Number of stockholders, . . . . .	974	976	+2	+0.21
Males, . . . . .	447	429	—18	—4.03
Females, . . . . .	359	364	+5	+1.39
Banks, trustees, etc., . . . . .	168	183	+15	+8.93
Aggregates: partners and stockholders, . .	978	981	+3	+0.31

## CARPETINGS — 1892, 1893 — Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . .	\$7,823,754	\$7,993,248	+\$169,494	+2.10

## STOCK USED. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . .	\$5,218,619	\$4,787,252	—\$431,367	—8.27
Wool (not specified), . . . .	2,307,176	2,226,591	—80,585	—3.49
Yarn, cotton . . . .	344,916	298,070	—46,846	—13.58
Yarn, jute . . . .	72,292	68,612	—3,680	—5.09
Yarn, linen . . . .	125,202	103,726	—21,476	—17.15
Yarn, worsted . . . .	1,298,243	992,373	—305,870	—23.56
Not classified in detail, . . . .	1,070,790	1,097,880	+27,090	+2.53

## STOCK USED. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Quantities	Percent- ages
Wool (not specified), . . . .	100 pounds	128,005	125,577	—2,428	—1.90
Yarn, cotton . . . .	100 pounds	31,819	27,566	—4,253	—13.37
Yarn, jute . . . .	100 pounds	9,110	8,691	—419	—4.60
Yarn, linen . . . .	100 pounds	8,223	6,722	—1,501	—18.25
Yarn, worsted . . . .	100 pounds	31,432	24,439	—6,993	—22.25

## STOCK USED. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measure- ment	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Amounts	Percent- ages
Wool (not specified), . . . .	100 pounds	\$18.02	\$17.73	—\$0.29	—1.61
Yarn, cotton . . . .	100 pounds	10.84	10.81	—0.03	—0.28
Yarn, jute . . . .	100 pounds	7.94	7.89	—0.05	—0.63
Yarn, linen . . . .	100 pounds	15.23	15.43	+0.20	+1.31
Yarn, worsted . . . .	100 pounds	41.30	40.61	—0.69	—1.67

## CARPETINGS — 1892, 1893 — Continued.

## GOODS MADE. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$8,214,540	\$7,427,385	—\$787,155	—9.58
Carpeting, Brussels . . . . .	2,912,525	2,617,565	—294,960	—10.13
Carpeting, Wilton . . . . .	1,125,716	891,276	—234,440	—20.83
Not classified in detail, . . . . .	4,176,299	3,918,544	—257,755	—6.17

## GOODS MADE. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Quantities	Percent- ages
Carpeting, Brussels . . . . .	100 yards	34,118	30,924	—3,194	—9.36
Carpeting, Wilton . . . . .	100 yards	7,346	5,837	—1,509	—20.54

## GOODS MADE. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measure- ment	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Amounts	Percent- ages
Carpeting, Brussels . . . . .	100 yards	\$85.37	\$84.65	—\$0.72	—0.84
Carpeting, Wilton . . . . .	100 yards	153.24	152.69	—0.55	—0.36

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	4,703	4,335	—368	—7.82
Smallest number, . . . . .	4,434	1,917	—2,517	—56.77
Greatest number, . . . . .	4,919	5,031	+112	+2.28
Excess of greatest over smallest number, .	485	3,114	+2,629	+542.06

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	2,125	2,502	4,627	2,238	2,683	4,920
February, . . . . .	2,134	2,542	4,676	2,256	2,694	4,950
March, . . . . .	2,130	2,581	4,711	2,246	2,720	4,966
April, . . . . .	2,109	2,543	4,652	2,246	2,703	4,949
May, . . . . .	2,105	2,525	4,630	2,238	2,709	4,947

## CARPETINGS — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
June, . . . . .	2,176	2,564	4,740	2,268	2,723	4,991
July, . . . . .	2,186	2,642	4,828	2,208	2,707	4,915
August, . . . . .	2,163	2,583	4,746	1,734	1,928	3,662
September, . . . . .	2,181	2,625	4,806	843	1,021	1,864
October, . . . . .	2,210	2,656	4,866	1,597	1,994	3,591
November, . . . . .	2,182	2,438	4,620	1,748	2,381	4,129
December, . . . . .	2,193	2,420	4,613	1,742	2,395	4,137
During the entire year,* . . .	-	-	-	12	-	12

\* 1 establishment in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,823,229	\$1,589,019	—\$234,210	—12.85
Average yearly earnings, . . . . .	387.67	366.56	—21.11	—5.45

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	364	784	1,148	314	664	978
\$5 but under \$6, . . . . .	176	504	680	202	536	738
\$6 but under \$7, . . . . .	302	370	672	140	443	583
\$7 but under \$8, . . . . .	166	231	397	316	375	691
\$8 but under \$9, . . . . .	222	211	433	233	236	469
\$9 but under \$10, . . . . .	260	283	543	258	283	541
\$10 but under \$12, . . . . .	253	237	490	245	178	423
\$12 but under \$15, . . . . .	309	15	324	312	82	394
\$15 but under \$20, . . . . .	162	1	163	208	2	210
\$20 and over, . . . . .	86	-	86	63	-	63
TOTALS, . . . . .	2,250	2,636	4,886	2,291	2,749	5,040

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	80.64	69.27	—11.87	—14.10
Average number of days in operation, . . .	303.33	247.53	—55.80	—18.40

**CARRIAGES AND WAGONS. 1892, 1893.****ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	132	132	=	=
Number of private firms, . . . . .	120	119	-1	-0.83
Number of partners, . . . . .	167	163	-4	-2.40
Males, . . . . .	165	161	-4	-2.42
Special, . . . . .	2	1	-1	-50.00
Estates, . . . . .	-	1	+1	-
Number of corporations, . . . . .	12	13	+1	+8.33
Number of stockholders, . . . . .	291	323	+32	+11.00
Males, . . . . .	207	236	+29	+14.01
Females, . . . . .	66	68	+2	+3.03
Banks, trustees, etc., . . . . .	18	19	+1	+5.56
Aggregates: partners and stockholders, .	458	486	+28	+5.76

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$3,026,145	\$3,108,416	+\$82,271	+2.72

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$1,741,604	\$1,610,781	-\$130,823	-7.51

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$4,171,404	\$3,887,001	-\$284,403	-6.82

## CARRIAGES AND WAGONS — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	2,409	2,128	—281	—11.66
Smallest number, . . . . .	1,935	1,400	—475	—24.55
Greatest number, . . . . .	2,936	2,808	—128	—4.36
Excess of greatest over smallest number, .	1,001	1,348	+347	+34.67

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	2,307	5	2,312	2,307	8	2,315
February, . . . . .	2,398	4	2,402	2,367	8	2,375
March, . . . . .	2,591	4	2,595	2,456	8	2,464
April, . . . . .	2,744	4	2,748	2,491	7	2,498
May, . . . . .	2,779	4	2,783	2,571	7	2,578
June, . . . . .	2,694	4	2,698	2,377	7	2,384
July, . . . . .	2,353	4	2,357	1,959	6	1,965
August, . . . . .	2,211	4	2,215	1,796	5	1,801
September, . . . . .	2,193	3	2,196	1,651	3	1,654
October, . . . . .	2,174	4	2,178	1,675	2	1,677
November, . . . . .	2,163	4	2,167	1,726	4	1,730
December, . . . . .	2,190	4	2,194	1,969	4	1,973
During the entire year,* . .	297	—	297	117	—	117

\* 23 establishments in 1892; 14 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,434,453	\$1,305,483	—\$128,970	—8.99
Average yearly earnings, . . . . .	595.46	613.48	+18.02	+3.03



## CARRIAGES AND WAGONS — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	82	—	82	55	1	56
\$5 but under \$6, . . . . .	67	3	70	57	—	57
\$6 but under \$7, . . . . .	49	—	49	57	2	59
\$7 but under \$8, . . . . .	104	1	105	127	2	129
\$8 but under \$9, . . . . .	141	—	141	108	2	110
\$9 but under \$10, . . . . .	288	—	288	322	—	322
\$10 but under \$12, . . . . .	510	—	510	518	—	518
\$12 but under \$15, . . . . .	903	—	903	727	—	727
\$15 but under \$20, . . . . .	684	—	684	673	—	673
\$20 and over, . . . . .	140	—	140	116	—	116
TOTALS, . . . . .	2,968	4	2,972	2,700	7	2,707

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	68.69	61.31	—7.38	—10.74
Average number of days in operation, . . .	298.03	289.24	—8.79	—2.95

## CEMENT, KAOLIN, LIME, AND PLASTER. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (—), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	7	7	=	=
Number of private firms, . . . . .	5	5	=	=
Number of partners, . . . . .	9	9	=	=
Males, . . . . .	9	9	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	19	16	—3	—15.79
Males, . . . . .	16	14	—2	—12.50
Females, . . . . .	2	2	=	=
Banks, trustees, etc., . . . . .	1	—	—1	—100.00
Aggregates: partners and stockholders, . .	28	25	—3	—10.71

CEMENT, KAOLIN, LIME, AND PLASTER — 1892, 1893  
— Continued.

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$90,300	\$96,300	+\$6,000	+6.64

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$167,540	\$184,026	+\$16,486	+9.84

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892 . .	. 1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$239,886	\$250,245	+\$10,359	+4.32

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	96	93	- 3	- 3.13
Smallest number, . . . . .	78	64	- 14	- 17.95
Greatest number, . . . . .	119	111	- 8	- 6.72
Excess of greatest over smallest number, .	41	47	+ 6	+ 14.63

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	78	-	78	67	-	67
February, . . . . .	78	-	78	67	-	67
March, . . . . .	80	-	80	77	-	77
April, . . . . .	80	-	80	93	-	93
May, . . . . .	113	-	113	97	-	97
June, . . . . .	98	-	98	97	-	97
July, . . . . .	95	-	95	96	-	96

**CEMENT, KAOLIN, LIME, AND PLASTER — 1892, 1893**  
— Concluded.

**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	107	-	107	107	-	107
September, . . . . .	109	-	109	108	-	108
October, . . . . .	109	-	109	103	-	103
November, . . . . .	99	-	99	92	-	92
December, . . . . .	85	-	85	90	-	90
During the entire year,* . .	18	-	18	8	-	8

\* 5 establishments in 1892; 3 establishments in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$45,684	\$43,145	—\$2,539	—5.56
Average yearly earnings, . . . . .	475.88	463.92	—11.96	—2.51

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	-	-	-	-	-	-
\$5 but under \$6, . . . . .	-	-	-	-	-	-
\$6 but under \$7, . . . . .	-	-	-	-	-	-
\$7 but under \$8, . . . . .	3	-	3	-	-	-
\$8 but under \$9, . . . . .	-	-	-	1	-	1
\$9 but under \$10, . . . . .	97	-	97	81	-	81
\$10 but under \$12, . . . . .	6	-	6	7	-	7
\$12 but under \$15, . . . . .	10	-	10	12	-	12
\$15 but under \$20, . . . . .	9	-	9	9	-	9
\$20 and over, . . . . .	1	-	1	2	-	2
TOTALS, . . . . .	126	-	126	112	-	112

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	74.86	73.57	—1.29	—1.72
Average number of days in operation, . . .	296.86	288.97	—7.88	—2.65

# CHEMICAL PREPARATIONS (COMPOUNDED). 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	10	10	=	=
Number of private firms, . . . . .	6	6	=	=
Number of partners, . . . . .	9	9	=	=
Males, . . . . .	7	7	=	=
Females, . . . . .	2	2	=	=
Number of corporations, . . . . .	4	4	=	=
Number of stockholders, . . . . .	41	46	+5	+12.20
Males, . . . . .	31	31	=	=
Females, . . . . .	7	10	+3	+42.86
Banks, trustees, etc., . . . . .	3	5	+2	+66.67
Aggregates: partners and stockholders, .	50	55	+5	+10.00

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$786,857	\$826,121	+\$39,264	+4.99

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$570,250	\$471,037	-\$99,213	-17.40

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,136,122	\$936,428	-\$199,694	-17.58

CHEMICAL PREPARATIONS (COMPOUNDED) — 1892, 1893  
— Continued.  
PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	322	304	-18	-5.59
Smallest number, . . . . .	285	251	-34	-11.93
Greatest number, . . . . .	359	342	-17	-4.74
Excess of greatest over smallest number, .	74	91	+17	+22.97

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	292	3	295	336	1	337
February, . . . . .	288	3	291	323	1	324
March, . . . . .	289	3	292	320	1	321
April, . . . . .	323	4	327	320	1	321
May, . . . . .	321	4	325	335	1	336
June, . . . . .	317	4	321	325	1	326
July, . . . . .	309	4	313	306	1	307
August, . . . . .	326	4	330	284	1	285
September, . . . . .	329	4	333	253	1	254
October, . . . . .	336	4	340	259	1	260
November, . . . . .	351	2	353	278	1	279
December, . . . . .	350	2	352	268	1	269
During the entire year,* . .	28	-	28	13	1	14

\* 5 establishments in 1892; 6 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$192,656	\$176,784	-\$15,872	-8.24
Average yearly earnings, . . . . .	598.31	581.53	-16.78	-2.80

**CHEMICAL PREPARATIONS (COMPOUNDED) — 1892, 1893**  
— Concluded.

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	-	1	1	1	-	1
\$5 but under \$6, . . . . .	2	-	2	-	-	-
\$6 but under \$7, . . . . .	3	-	3	6	-	6
\$7 but under \$8, . . . . .	6	-	6	8	-	8
\$8 but under \$9, . . . . .	3	1	4	12	-	12
\$9 but under \$10, . . . . .	153	-	153	153	-	153
\$10 but under \$12, . . . . .	52	-	52	67	1	68
\$12 but under \$15, . . . . .	103	-	103	85	-	85
\$15 but under \$20, . . . . .	22	-	22	14	-	14
\$20 and over, . . . . .	3	-	3	3	-	3
<b>TOTALS, . . . . .</b>	<b>347</b>	<b>2</b>	<b>349</b>	<b>349</b>	<b>1</b>	<b>350</b>

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	66.00	53.30	-12.70	-19.24
Average number of days in operation, . . .	302.21	297.03	-5.18	-1.71

**CLOCKS, WATCHES, AND JEWELRY. 1892, 1893.**

**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	97	97	=	=
Number of private firms, . . . . .	92	90	-2	-2.17
Number of partners, . . . . .	190	191	+1	+0.53
Males, . . . . .	181	173	-8	-4.42
Females, . . . . .	7	11	+4	+57.14
Special, . . . . .	2	7	+5	+250.00
Number of corporations, . . . . .	5	7	+2	+40.00
Number of stockholders, . . . . .	164	178	+14	+8.54
Males, . . . . .	136	149	+13	+9.56
Females, . . . . .	28	29	+1	+3.57
Aggregates: partners and stockholders, .	354	369	+15	+4.24

## CLOCKS, WATCHES, AND JEWELRY — 1892, 1893 — Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . .	\$5,327,142	\$5,095,165	—\$231,977	—4.35

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . .	\$2,318,361	\$1,781,400	—\$536,961	—23.16

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$6,794,244	\$5,561,156	—\$1,233,088	—18.15

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	3,638	3,372	—316	—8.57
Smallest number, . . . . .	3,172	2,533	—639	—20.15
Greatest number, . . . . .	4,234	4,105	—129	—3.05
Excess of greatest over smallest number, .	1,062	1,572	+510	+48.02

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	2,823	973	3,796	2,840	1,005	3,845
February, . . . . .	2,796	983	3,779	2,833	1,000	3,833
March, . . . . .	2,648	949	3,597	2,756	959	3,715
April, . . . . .	2,567	914	3,481	2,661	906	3,567
May, . . . . .	2,538	870	3,408	2,569	879	3,448
June, . . . . .	2,780	968	3,748	2,632	864	3,496
July, . . . . .	2,758	968	3,726	2,496	861	3,357

## CLOCKS, WATCHES, AND JEWELRY — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	2,700	964	3,673	2,201	760	2,961
September, . . . . .	2,739	982	3,721	2,201	756	2,957
October, . . . . .	2,810	998	3,808	2,306	797	3,103
November, . . . . .	2,776	991	3,767	2,326	771	3,097
December, . . . . .	2,758	981	3,739	2,303	781	3,084
During the entire year,* . . . . .	343	106	451	201	112	313

\* 21 establishments in 1892; 12 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$2,100,621	\$1,763,752	—\$336,869	—16.04
Average yearly earnings, . . . . .	569.58	523.06	—46.52	—8.17

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	101	104	205	87	85	172
\$5 but under \$6, . . . . .	118	211	329	99	180	279
\$6 but under \$7, . . . . .	136	156	292	124	197	321
\$7 but under \$8, . . . . .	148	198	346	120	232	352
\$8 but under \$9, . . . . .	177	143	320	175	141	316
\$9 but under \$10, . . . . .	203	103	306	252	95	347
\$10 but under \$12, . . . . .	404	60	464	379	65	444
\$12 but under \$15, . . . . .	611	22	633	656	11	667
\$15 but under \$20, . . . . .	822	16	838	779	10	789
\$20 and over, . . . . .	396	2	398	330	6	336
TOTALS, . . . . .	3,116	1,015	4,131	3,001	1,022	4,023

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	64.14	52.33	—11.81	—18.41
Average number of days in operation, . . . . .	236.46	200.54	—25.92	—9.05



**CLOTHING. 1892, 1893.**  
**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	135	135	=	=
Number of private firms, . . . . .	114	112	-2	-1.75
Number of partners, . . . . .	230	223	-7	-3.04
Males, . . . . .	227	220	-7	-3.08
Females, . . . . .	3	3	=	=
Special, . . . . .	1	-	-1	-100.00
Estates, . . . . .	-	1	+1	-
Number of corporations, . . . . .	21	23	+2	+9.52
Number of stockholders, . . . . .	593	594	+1	+0.17
Males, . . . . .	414	385	-29	-7.00
Females, . . . . .	158	177	+19	+12.03
Banks, trustees, etc., . . . . .	21	32	+11	+52.38
Aggregates: partners and stockholders, .	823	817	-6	-0.73

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$10,843,000	\$10,533,035	-\$310,014	-2.86

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$16,297,433	\$13,929,715	-\$2,367,718	-14.53

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$27,234,723	\$24,014,364	-\$3,270,359	-11.99

CLOTHING — 1892, 1893 — Continued.

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	9,241	7,544	—1,697	—18.36
Smallest number, . . . . .	7,576	5,502	—2,074	—27.38
Greatest number, . . . . .	10,718	9,230	—1,488	—13.88
Excess of greatest over smallest number, .	3,142	3,728	+586	+18.65

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	2,900	5,973	8,873	2,308	5,528	7,836
February, . . . . .	2,831	6,041	8,872	2,343	5,717	8,060
March, . . . . .	2,872	6,270	9,142	2,395	6,011	8,406
April, . . . . .	3,048	6,597	9,645	2,396	6,245	8,641
May, . . . . .	2,959	6,636	9,595	2,381	6,161	8,542
June, . . . . .	2,905	6,440	9,345	2,337	5,825	8,162
July, . . . . .	2,897	6,045	8,942	2,116	4,898	7,009
August, . . . . .	2,793	5,725	8,518	1,911	4,231	6,142
September, . . . . .	2,949	6,312	9,261	1,982	4,708	6,685
October, . . . . .	3,186	6,733	9,919	2,031	5,164	7,195
November, . . . . .	3,016	6,444	9,460	2,007	5,083	7,090
December, . . . . .	3,037	6,215	9,252	1,964	4,792	6,756
During the entire year,* . .	714	1,352	2,066	266	309	575

\* 40 establishments in 1892; 24 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$3,697,186	\$3,101,421	—\$595,765	—16.11
Average yearly earnings, . . . . .	400.09	411.11	+11.02	+2.75

## CLOTHING — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	112	1,819	1,431	102	1,219	1,321
\$5 but under \$6, . . . . .	91	1,017	1,108	90	965	1,055
\$6 but under \$7, . . . . .	141	1,199	1,340	173	1,126	1,299
\$7 but under \$8, . . . . .	143	982	1,130	128	963	1,091
\$8 but under \$9, . . . . .	161	810	971	166	845	1,011
\$9 but under \$10, . . . . .	247	517	764	207	545	752
\$10 but under \$12, . . . . .	296	370	666	285	446	731
\$12 but under \$15, . . . . .	523	184	707	445	251	696
\$15 but under \$20, . . . . .	550	46	596	556	44	600
\$20 and over, . . . . .	480	8	488	392	8	400
TOTALS, . . . . .	2,749	6,452	9,201	2,544	6,412	8,956

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	78.50	63.57	-9.93	-13.51
Average number of days in operation, . . .	296.97	279.53	-17.44	-5.87

COOKING, LIGHTING, AND HEATING APPARATUS.  
1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	36	36	=	=
Number of private firms, . . . . .	20	20	=	=
Number of partners, . . . . .	35	33	-2	-5.71
Males, . . . . .	33	31	-2	-6.06
Females, . . . . .	1	-	-1	-100.00
Special, . . . . .	1	1	=	=
Estates, . . . . .	-	1	+1	-
Number of corporations, . . . . .	16	16	=	=
Number of stockholders, . . . . .	369	380	+11	+2.98
Males, . . . . .	296	285	-11	-3.72
Females, . . . . .	65	86	+21	+32.31
Banks, trustees, etc., . . . . .	8	9	+1	+12.50
Aggregates: partners and stockholders, .	404	413	+9	+2.23

COOKING, LIGHTING, AND HEATING APPARATUS — 1892, 1893  
— Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$2,608,027	\$2,538,827	-\$69,800	-2.68

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$1,118,993	\$957,000	-\$156,993	-14.09

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$3,414,780	\$3,202,477	-\$212,303	-6.22

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	2,256	2,076	-180	-7.98
Smallest number, . . . . .	1,778	1,410	-368	-20.47
Greatest number, . . . . .	2,463	2,443	-20	-0.81
Excess of greatest over smallest number, .	690	1,033	+343	+49.71

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	1,851	-	1,851	1,845	-	1,845
February, . . . . .	2,123	-	2,123	2,033	-	2,033
March, . . . . .	2,217	-	2,217	2,215	-	2,215
April, . . . . .	2,262	-	2,262	2,229	-	2,229
May, . . . . .	2,312	-	2,312	2,200	-	2,200
June, . . . . .	2,312	-	2,312	2,124	-	2,124
July, . . . . .	2,162	-	2,162	1,913	-	1,913

COOKING, LIGHTING, AND HEATING APPARATUS — 1892, 1893  
— Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	2,350	-	2,350	1,907	-	1,907
September, . . . . .	2,427	-	2,427	2,055	-	2,055
October, . . . . .	2,426	-	2,426	2,196	-	2,196
November, . . . . .	2,353	-	2,353	2,140	-	2,140
December, . . . . .	2,266	-	2,266	2,035	-	2,035
During the entire year,* . .	365	-	365	82	-	82

\* 5 establishments in 1892; 3 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,406,106	\$1,300,806	—\$105,300	—7.49
Average yearly earnings, . . . . .	623.27	626.59	+3.32	+0.53

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	59	-	59	85	-	85
\$5 but under \$6, . . . . .	28	-	28	66	-	66
\$6 but under \$7, . . . . .	55	-	55	82	-	82
\$7 but under \$8, . . . . .	88	-	88	118	-	118
\$8 but under \$9, . . . . .	88	-	88	91	-	91
\$9 but under \$10, . . . . .	374	-	374	317	-	317
\$10 but under \$12, . . . . .	330	-	330	332	-	332
\$12 but under \$15, . . . . .	460	-	460	477	-	477
\$15 but under \$20, . . . . .	432	-	432	468	-	468
\$20 and over, . . . . .	403	-	403	380	-	380
TOTALS, . . . . .	2,317	-	2,317	2,416	-	2,416

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	72.94	62.06	—10.88	—14.92
Average number of days in operation, . .	281.07	265.50	—15.57	—5.54

## CORDAGE AND TWINE. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	27	27	=	=
Number of private firms, . . . . .	14	14	=	=
Number of partners, . . . . .	22	22	=	=
Males, . . . . .	20	19	-1	-5.00
Special, . . . . .	2	2	=	=
Estates, . . . . .	-	1	+1	-
Number of corporations, . . . . .	13	13	=	=
Number of stockholders, . . . . .	296	299	+3	+1.01
Males, . . . . .	209	205	-4	-1.91
Females, . . . . .	78	85	+7	+8.97
Banks, trustees, etc., . . . . .	9	9	=	=
Aggregates: partners and stockholders, .	318	321	+3	+0.94

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$5,022,559	\$6,100,346	+\$1,137,787	+22.65

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$6,462,752	\$6,225,632	-\$237,120	-3.70

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$8,722,796	\$8,144,201	-\$578,595	-6.63

## CORDAGE AND TWINE — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	3,415	3,286	-129	-3.75
Smallest number, . . . . .	2,578	2,095	+117	+4.54
Greatest number, . . . . .	4,111	3,820	-291	-7.08
Excess of greatest over smallest number, .	1,533	1,125	-408	-26.61

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	1,838	1,417	3,255	1,980	1,429	3,409
February, . . . . .	2,029	1,445	3,474	1,995	1,441	3,436
March, . . . . .	2,061	1,488	3,549	2,040	1,499	3,539
April, . . . . .	2,141	1,492	3,633	2,132	1,562	3,694
May, . . . . .	2,129	1,486	3,615	2,074	1,564	3,638
June, . . . . .	1,991	1,433	3,424	2,083	1,493	3,576
July, . . . . .	2,034	1,372	3,406	1,907	1,268	3,175
August, . . . . .	2,026	1,375	3,401	1,638	1,197	2,835
September, . . . . .	1,788	1,279	3,067	1,691	1,249	2,940
October, . . . . .	1,831	1,305	3,136	1,737	1,198	2,935
November, . . . . .	2,095	1,369	3,464	1,854	1,196	3,050
December, . . . . .	2,150	1,385	3,535	1,881	1,257	3,138
During the entire year,* . .	23	46	69	1	-	1

\* 4 establishments in 1892; 1 establishment in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,200,192	\$1,149,812	-\$50,380	-4.20
Average yearly earnings, . . . . .	851.45	349.91	-1.54	-0.44

CORDAGE AND TWINE — 1892, 1893 — Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	211	671	882	187	691	878
\$5 but under \$6, . . . .	207	414	621	135	492	627
\$6 but under \$7, . . . .	316	311	627	196	204	400
\$7 but under \$8, . . . .	153	105	258	147	174	321
\$8 but under \$9, . . . .	606	68	674	962	41	1,003
\$9 but under \$10, . . . .	598	15	613	171	24	195
\$10 but under \$12, . . . .	174	2	176	159	4	163
\$12 but under \$15, . . . .	184	5	189	123	3	131
\$15 but under \$20, . . . .	122	-	122	78	-	78
\$20 and over, . . . . .	30	-	30	29	-	29
TOTALS, . . . . .	2,601	1,581	4,182	2,192	1,633	3,825

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	74.70	65.07	-9.63	-12.89
Average number of days in operation, . .	295.19	234.06	-11.11	-3.76

CORKS, BUNGS, AND TAPS. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . .	3	3	=	=
Number of private firms, . . . . .	3	3	=	=
Number of partners, . . . . .	4	4	=	=
Males, . . . . .	4	4	=	=

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$23,500	\$20,500	-\$3,000	-23.07



## CORDAGE AND TWINE — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	3,415	3,286	-129	-3.73
Smallest number, . . . . .	2,573	2,695	+117	+4.54
Greatest number, . . . . .	4,111	3,820	-291	-7.06
Excess of greatest over smallest number, .	1,538	1,125	-408	-26.61

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	1,838	1,417	3,255	1,980	1,429	3,409
February, . . . . .	2,029	1,445	3,474	1,995	1,441	3,436
March, . . . . .	2,061	1,488	3,549	2,040	1,499	3,539
April, . . . . .	2,141	1,492	3,633	2,132	1,562	3,694
May, . . . . .	2,129	1,486	3,615	2,074	1,564	3,638
June, . . . . .	1,991	1,433	3,424	2,083	1,493	3,576
July, . . . . .	2,034	1,372	3,406	1,907	1,268	3,175
August, . . . . .	2,026	1,375	3,401	1,638	1,197	2,835
September, . . . . .	1,788	1,279	3,067	1,661	1,249	2,940
October, . . . . .	1,831	1,305	3,136	1,737	1,198	2,935
November, . . . . .	2,095	1,369	3,464	1,854	1,196	3,050
December, . . . . .	2,160	1,385	3,535	1,881	1,257	3,138
During the entire year,* . . . . .	23	46	69	1	-	1

\* 4 establishments in 1892; 1 establishment in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,200,192	\$1,149,812	-\$50,380	-4.20
Average yearly earnings, . . . . .	351.45	349.91	-1.54	-0.44

CORDAGE AND TWINE — 1892, 1893 — Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	211	671	882	187	691	878
\$5 but under \$6, . . . . .	207	414	621	135	492	627
\$6 but under \$7, . . . . .	316	311	627	196	204	400
\$7 but under \$8, . . . . .	153	105	258	147	174	321
\$8 but under \$9, . . . . .	606	58	664	962	41	1,003
\$9 but under \$10, . . . . .	598	15	613	171	24	195
\$10 but under \$12, . . . . .	174	2	176	159	4	163
\$12 but under \$15, . . . . .	184	5	189	123	3	131
\$15 but under \$20, . . . . .	122	-	122	78	-	78
\$20 and over, . . . . .	30	-	30	29	-	29
TOTALS, . . . . .	2,601	1,581	4,182	2,192	1,633	3,825

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	74.70	65.07	-9.63	-12.89
Average number of days in operation, . . . . .	295.19	284.08	-11.11	-3.76

CORKS, BUNGS, AND TAPS. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . . . .	3	3	=	=
Number of private firms, . . . . .	3	3	=	=
Number of partners, . . . . .	4	4	=	=
Males, . . . . .	4	4	=	=

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$23,500	\$20,500	-\$8,000	-28.07

## CORKS, BUNGS, AND TAPS—1892, 1893—Continued.

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$15,449	\$13,642	—\$1,807	—11.70

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$41,677	\$40,512	—\$1,165	—2.50

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	37	32	—5	—13.51
Smallest number, . . . . .	34	26	—8	—23.53
Greatest number, . . . . .	39	38	—1	—2.56
Excess of greatest over smallest number, .	5	12	+7	+140.00

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	30	6	36	25	8	33
February, . . . . .	30	6	36	27	7	34
March, . . . . .	31	5	36	26	7	33
April, . . . . .	32	5	37	30	7	37
May, . . . . .	33	4	37	28	7	35
June, . . . . .	34	5	39	28	6	34
July, . . . . .	33	5	38	29	6	35

CORKS, BUNGS, AND TAPS — 1892, 1893 — Concluded.

PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	33	4	37	27	6	33
September, . . . . .	33	4	37	25	6	31
October, . . . . .	32	4	36	22	5	27
November, . . . . .	30	4	34	23	5	28
December, . . . . .	30	6	36	22	4	26
During the entire year,* . .	15	-	15	-	-	-

\* 1 establishment in 1892.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$11,066	\$9,706	-\$1,360	-12.29
Average yearly earnings, . . . . .	299.08	303.81	+4.23	+1.41

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	5	6	11	6	5	11
\$5 but under \$6, . . . . .	2	-	2	4	-	4
\$6 but under \$7, . . . . .	3	-	3	3	2	5
\$7 but under \$8, . . . . .	2	-	2	2	-	2
\$8 but under \$9, . . . . .	7	-	7	3	-	3
\$9 but under \$10, . . . . .	6	-	6	1	-	1
\$10 but under \$12, . . . . .	6	-	6	7	-	7
\$12 but under \$15, . . . . .	1	-	1	3	-	3
\$15 but under \$20, . . . . .	2	-	2	2	-	2
\$20 and over, . . . . .	-	-	-	-	-	-
TOTALS, . . . . .	34	6	40	31	7	38

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	57.00	58.33	+1.33	+2.33
Average number of days in operation, . .	298.32	296.00	-2.32	-0.78

## COTTON GOODS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	149	149	=	=
Number of private firms, . . . . .	34	33	-1	-2.94
Number of partners, . . . . .	73	63	-10	-13.70
Males, . . . . .	66	54	-12	-18.18
Females, . . . . .	6	6	=	=
Estates, . . . . .	1	3	+2	+200.00
Number of corporations, . . . . .	115	116	+1	+0.87
Number of stockholders, . . . . .	19,195	19,621	+426	+2.22
Males, . . . . .	9,837	9,690	-147	-1.49
Females, . . . . .	6,961	7,296	+315	+4.51
Banks, trustees, etc., . . . . .	2,377	2,635	+258	+10.85
Aggregates: partners and stockholders, .	19,268	19,684	+416	+2.16

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$119,652,351	\$118,855,744	-\$796,607	-0.67

## STOCK USED. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$46,961,841	\$47,411,932	+\$450,091	+0.96
Cotton, raw . . . . .	31,871,253	31,980,708	+109,455	+0.34
Cotton, raw (Egyptian), . . . . .	457,380	491,357	+33,977	+7.43
Cotton, raw (Sea Island), . . . . .	308,667	356,192	+47,525	+15.40
Yarn, cotton . . . . .	2,032,381	1,641,359	-391,022	-19.24
Not classified in detail, . . . . .	12,292,160	12,942,316	+650,156	+5.29

## COTTON GOODS — 1892, 1893 — Continued.

## STOCK USED. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measurement	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Quantities	Percentages
Cotton, raw . . . . .	100 pounds	3,719,853	3,574,983	-144,870	-3.89
Cotton, raw (Egyptian), . . .	100 pounds	38,954	43,881	+4,927	+12.65
Cotton, raw (Sea Island), . . .	100 pounds	16,222	16,040	-182	-1.12
Yarn, cotton . . . . .	100 pounds	85,267	68,033	-17,234	-20.21

## STOCK USED. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measurement	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percentages
Cotton, raw . . . . .	100 pounds	\$3.57	\$3.95	+\$0.38	+4.43
Cotton, raw (Egyptian), . . .	100 pounds	11.74	11.20	-0.54	-4.60
Cotton, raw (Sea Island), . . .	100 pounds	19.03	23.21	+3.18	+16.71
Yarn, cotton . . . . .	100 pounds	23.84	24.13	+0.29	+1.22

## GOODS MADE. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percentages
Total value of goods made and work done, .	\$90,811,928	\$88,189,618	-\$2,622,310	-2.89
Batting, . . . . .	89,128	82,358	-6,770	-7.60
Cloth, awning . . . . .	320,844	198,713	-122,131	-38.07
Cloth, cotton . . . . .	18,791,191	19,393,821	+602,630	+3.21
Cloth, print . . . . .	10,042,072	10,492,162	+450,090	+4.48
Cloth, printed . . . . .	2,070,296	2,198,851	+128,555	+6.21
Cottonades, . . . . .	374,290	305,179	-69,111	-18.46
Denim, . . . . .	2,675,545	2,823,184	+147,639	+5.52
Dress goods, . . . . .	2,027,952	1,652,395	-375,557	-18.52
Drill, . . . . .	287,632	242,616	-45,016	-15.65
Duck, . . . . .	643,906	614,661	-29,245	-4.54
Flannel, . . . . .	1,965,470	1,874,965	-90,505	-4.60
Gingham, . . . . .	5,303,373	4,353,078	-950,295	-16.34
Quilts, . . . . .	217,400	206,500	-10,900	-5.01
Sheeting, . . . . .	2,057,266	1,918,816	-138,450	-6.73
Shirting, . . . . .	1,636,007	1,526,267	-109,740	-6.71
Thread, . . . . .	2,127,839	2,005,879	-122,460	-5.76
Ticking, . . . . .	517,190	385,673	-131,517	-25.43
Twill, . . . . .	265,681	293,361	+27,680	+10.42
Twine, . . . . .	189,972	147,157	-42,815	-22.54
Warp, . . . . .	909,153	680,592	-228,561	-25.14
Waste, . . . . .	604,433	523,467	-80,966	-13.40
Yarn, . . . . .	7,776,516	6,756,554	-1,019,962	-13.12
Not classified in detail, . . . .	30,018,772	29,513,869	-504,903	-1.68

**COTTON GOODS — 1892, 1893 — Concluded.**  
**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	35,401	37,859	73,260	31,688	33,733	65,421
September, . . . . .	35,238	38,163	73,401	29,208	30,857	60,065
October, . . . . .	35,279	38,321	73,600	34,895	37,931	72,826
November, . . . . .	35,303	38,642	73,945	35,340	38,382	73,722
December, . . . . .	35,454	38,939	74,393	35,285	38,105	73,390
During the entire year,* . .	8,906	8,452	17,358	5,561	5,318	10,879

\* 37 establishments in 1892; 20 establishments in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$25,515,747	\$25,268,510	—\$247,237	—0.97
Average yearly earnings, . . . . .	845.99	843.60	—2.39	—0.60

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	6,617	11,338	17,955	6,591	11,238	17,849
\$5 but under \$6, . . . . .	3,601	7,670	11,271	3,860	7,570	11,430
\$6 but under \$7, . . . . .	6,113	8,067	14,180	6,235	8,340	14,575
\$7 but under \$8, . . . . .	4,321	5,847	10,168	4,390	5,639	10,029
\$8 but under \$9, . . . . .	3,476	3,486	6,962	3,990	4,166	8,156
\$9 but under \$10, . . . . .	3,919	2,176	6,095	3,978	2,303	6,281
\$10 but under \$12, . . . . .	4,317	1,035	5,352	4,615	1,106	5,721
\$12 but under \$15, . . . . .	2,905	98	3,003	2,894	141	3,035
\$15 but under \$20, . . . . .	1,004	6	1,010	1,103	11	1,114
\$20 and over, . . . . .	539	—	539	533	1	534
TOTALS, . . . . .	36,812	39,723	76,535	38,189	40,535	78,724

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	93.77	86.09	—7.68	—8.19
Average number of days in operation, . .	304.85	282.09	—22.76	—7.47

**COTTON, WOOLLEN, AND OTHER TEXTILES.  
1892, 1893.**

**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (—), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	3	3	=	=
Number of private firms, . . . . .	1	1	=	=
Number of partners, . . . . .	3	3	=	=
Males, . . . . .	3	3	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	457	468	+11	+2.41
Males, . . . . .	192	191	—1	—0.52
Females, . . . . .	150	159	+9	+6.00
Banks, trustees, etc., . . . . .	115	118	+3	+2.61
Aggregates: partners and stockholders, .	460	471	+11	+2.39

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$3,564,471	\$3,532,450	—\$32,021	—0.90

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$1,780,097	\$1,461,530	—\$318,567	—17.90

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$3,352,505	\$2,798,118	—\$554,387	—16.54



**COTTON GOODS — 1892, 1893 — Concluded.**  
**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	35,401	37,859	73,260	31,688	33,733	65,421
September, . . . . .	35,238	38,168	73,401	29,208	30,857	60,065
October, . . . . .	35,279	38,321	73,600	34,895	37,931	72,826
November, . . . . .	35,303	38,642	73,945	35,340	38,382	73,722
December, . . . . .	35,454	38,939	74,393	35,285	38,105	73,390
During the entire year,* . . . . .	8,906	8,452	17,358	5,561	5,318	10,879

\* 37 establishments in 1892; 20 establishments in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$25,515,747	\$25,268,510	—\$247,237	—0.97
Average yearly earnings, . . . . .	345.99	343.60	—2.39	—0.69

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	6,617	11,338	17,955	6,591	11,258	17,849
\$5 but under \$6, . . . . .	3,601	7,670	11,271	3,860	7,570	11,430
\$6 but under \$7, . . . . .	6,113	8,067	14,180	6,235	8,340	14,575
\$7 but under \$8, . . . . .	4,321	5,847	10,168	4,390	5,639	10,029
\$8 but under \$9, . . . . .	3,476	3,486	6,962	3,990	4,166	8,156
\$9 but under \$10, . . . . .	3,919	2,176	6,095	3,978	2,303	6,281
\$10 but under \$12, . . . . .	4,317	1,035	5,352	4,615	1,106	5,721
\$12 but under \$15, . . . . .	2,905	98	3,003	2,894	141	3,035
\$15 but under \$20, . . . . .	1,004	6	1,010	1,103	11	1,114
\$20 and over, . . . . .	539	—	539	533	1	534
TOTALS, . . . . .	36,812	39,723	76,535	38,189	40,535	78,724

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	93.77	86.09	—7.68	—8.19
Average number of days in operation, . . . . .	304.85	282.09	—22.76	—7.47

# COTTON, WOOLLEN, AND OTHER TEXTILES. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	3	3	=	=
Number of private firms, . . . . .	1	1	=	=
Number of partners, . . . . .	3	3	=	=
Males, . . . . .	3	3	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	457	468	+11	+2.41
Males, . . . . .	192	191	-1	-0.52
Females, . . . . .	150	159	+9	+6.00
Banks, trustees, etc., . . . . .	115	118	+3	+2.61
Aggregates: partners and stockholders, .	460	471	+11	+2.39

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$3,564,471	\$3,532,450	-\$32,021	-0.90

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$1,780,097	\$1,461,530	-\$318,567	-17.90

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$3,352,505	\$2,798,118	-\$554,387	-16.54

COTTON, WOOLLEN, AND OTHER TEXTILES — 1892, 1893  
— Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	2,270	1,917	-353	-15.56
Smallest number, . . . . .	2,007	852	-1,655	-82.46
Greatest number, . . . . .	2,472	2,271	-201	-8.13
Excess of greatest over smallest number, .	465	1,919	+1,454	+312.60

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	1,121	1,143	2,264	1,044	1,170	2,214
February, . . . . .	1,144	1,152	2,296	1,069	1,160	2,229
March, . . . . .	1,094	1,227	2,321	1,022	1,140	2,162
April, . . . . .	1,134	1,252	2,386	986	1,122	2,108
May, . . . . .	1,017	1,257	2,274	957	1,095	2,052
June, . . . . .	1,070	1,224	2,294	944	1,082	2,026
July, . . . . .	939	1,202	2,141	916	1,079	1,995
August, . . . . .	1,005	1,107	2,112	836	1,002	1,838
September, . . . . .	1,013	1,163	2,176	299	129	428
October, . . . . .	998	1,218	2,216	722	990	1,712
November, . . . . .	1,160	1,243	2,403	977	1,161	2,138
December, . . . . .	1,157	1,204	2,361	951	1,147	2,098

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$856,455	\$702,016	-\$154,439	-18.03
Average yearly earnings, . . . . .	877.29	866.21	-11.08	-2.91

COTTON, WOOLLEN, AND OTHER TEXTILES — 1892, 1893  
— Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	70	185	255	68	126	194
\$5 but under \$6, . . . . .	56	373	429	64	352	416
\$6 but under \$7, . . . . .	183	391	574	145	245	390
\$7 but under \$8, . . . . .	347	207	554	242	204	506
\$8 but under \$9, . . . . .	86	99	185	147	138	285
\$9 but under \$10, . . . . .	121	38	159	96	75	171
\$10 but under \$12, . . . . .	107	5	112	121	23	144
\$12 but under \$15, . . . . .	171	1	172	123	6	129
\$15 but under \$20, . . . . .	37	2	39	34	-	34
\$20 and over, . . . . .	23	-	23	20	-	20
TOTALS, . . . . .	1,201	1,301	2,502	1,060	1,229	2,289

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	71.67	69.33	-2.34	-3.26
Average number of days in operation, . . .	304.61	265.93	-48.68	-15.98

CRAYONS, PENCILS, CRUCIBLES, ETC. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	3	3	=	=
Number of private firms, . . . . .	1	1	=	=
Number of partners, . . . . .	2	2	=	=
Males, . . . . .	2	2	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	50	50	=	=
Males, . . . . .	37	35	-2	-5.41
Females, . . . . .	13	15	+2	+15.38
Aggregates: partners and stockholders, . .	52	52	=	=

## CRAYONS, PENCILS, CRUCIBLES, ETC. — 1892, 1893 — Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$60,000	\$60,000	*=	*=

\* No change.

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$29,639	\$20,923	—\$8,716	—29.41

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$62,054	\$38,843	—\$23,211	—37.40

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	21	18	—3	—14.29
Smallest number, . . . . .	16	15	—1	—6.25
Greatest number, . . . . .	27	22	—5	—18.52
Excess of greatest over smallest number, .	11	7	—4	—36.36

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	23	—	23	22	—	22
February, . . . . .	23	3	26	22	—	22
March, . . . . .	24	—	24	20	—	20
April, . . . . .	26	—	26	20	—	20
May, . . . . .	23	—	23	20	—	20
June, . . . . .	23	—	23	18	—	18
July, . . . . .	19	—	19	16	—	16

## CRAYONS, PENCILS, CRUCIBLES, ETC. — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	19	-	19	15	-	15
September, . . . . .	18	-	18	14	-	14
October, . . . . .	18	-	18	14	-	14
November, . . . . .	17	-	17	16	-	16
December, . . . . .	22	-	22	18	-	18
During the entire year,* . .	12	-	12	12	-	12

\* 1 establishment in 1892; 1 establishment in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$10,644	\$7,893	—\$2,751	—25.85
Average yearly earnings, . . . . .	506.86	438.50	—68.36	—13.49

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	2	-	2	6	-	6
\$5 but under \$6, . . . . .	1	3	4	-	-	-
\$6 but under \$7, . . . . .	3	-	3	1	-	1
\$7 but under \$8, . . . . .	1	-	1	-	-	-
\$8 but under \$9, . . . . .	-	-	-	4	-	4
\$9 but under \$10, . . . . .	2	-	2	2	-	2
\$10 but under \$12, . . . . .	4	-	4	2	-	2
\$12 but under \$15, . . . . .	3	-	3	4	-	4
\$15 but under \$20, . . . . .	3	-	3	2	-	2
\$20 and over, . . . . .	1	-	1	1	-	1
TOTALS, . . . . .	25	3	28	22	-	22

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	66.67	53.33	—13.34	—20.01
Average number of days in operation, . . .	234.81	249.89	—34.92	—12.26

**DRUGS AND MEDICINES. 1892, 1893.****ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	23	23	=	=
Number of private firms, . . . . .	15	14	-1	-6.67
Number of partners, . . . . .	26	23	-3	-11.54
Males, . . . . .	25	21	-4	-16.00
Females, . . . . .	1	2	+1	+100.00
Number of corporations, . . . . .	8	9	+1	+12.50
Number of stockholders, . . . . .	126	123	-3	-2.38
Males, . . . . .	89	82	-7	-7.87
Females, . . . . .	33	36	+3	+9.09
Banks, trustees, etc., . . . . .	4	5	+1	+25.00
Aggregates: partners and stockholders, .	152	146	-6	-3.95

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$1,286,067	\$1,342,310	+\$56,243	+4.37

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$1,953,196	\$1,606,074	-\$347,122	-17.77

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$3,226,651	\$3,101,935	-\$124,716	-3.87

DRUGS AND MEDICINES — 1892, 1893 — Continued.  
PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	466	440	—26	—5.58
Smallest number, . . . . .	386	367	—19	—4.92
Greatest number, . . . . .	538	505	—33	—6.13
Excess of greatest over smallest number, .	152	138	—14	—9.21

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	248	224	472	232	202	434
February, . . . . .	256	236	492	234	205	439
March, . . . . .	262	244	506	245	215	460
April, . . . . .	257	237	494	262	222	484
May, . . . . .	252	242	494	257	218	475
June, . . . . .	247	217	464	247	212	459
July, . . . . .	236	210	446	233	190	423
August, . . . . .	233	188	421	218	170	388
September, . . . . .	236	212	448	224	199	423
October, . . . . .	235	203	438	219	196	415
November, . . . . .	234	209	443	222	197	419
December, . . . . .	237	206	443	227	192	419
During the entire year,* . .	29	18	47	39	19	58

\* 8 establishments in 1892; 10 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$191,297	\$175,319	—\$15,978	—8.35
Average yearly earnings, . . . . .	410.51	398.45	—12.06	—2.94



## DRUGS AND MEDICINES — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	85	43	78	28	45	73
\$5 but under \$6, . . . . .	12	55	67	14	47	61
\$6 but under \$7, . . . . .	18	112	130	28	82	110
\$7 but under \$8, . . . . .	20	24	44	31	27	58
\$8 but under \$9, . . . . .	21	7	28	20	9	29
\$9 but under \$10, . . . . .	40	10	50	35	9	44
\$10 but under \$12, . . . . .	34	2	36	31	3	34
\$12 but under \$15, . . . . .	45	-	45	49	-	49
\$15 but under \$20, . . . . .	38	3	41	34	2	36
\$20 and over, . . . . .	10	-	10	12	-	12
TOTALS, . . . . .	273	256	529	282	224	506

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	57.43	55.61	-1.82	-3.17
Average number of days in operation, . . .	302.16	295.33	-6.83	-2.26

## DYESTUFFS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	5	5	=	=
Number of private firms, . . . . .	3	3	=	=
Number of partners, . . . . .	5	5	=	=
Males, . . . . .	4	4	=	=
Females, . . . . .	1	1	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	13	16	+3	+23.08
Males, . . . . .	12	14	+2	+16.67
Females, . . . . .	1	1	=	=
Banks, trustees, etc., . . . . .	-	1	+1	.
Aggregates: partners and stockholders, . .	18	21	+3	+16.67

## DYESTUFFS — 1892, 1893 — Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$622,000	\$626,500	+\$4,500	+0.72

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$684,269	\$422,354	-\$261,915	-38.28

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$867,999	\$553,833	-\$314,166	-36.19

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	164	121	-43	-26.23
Smallest number, . . . . .	134	87	-47	-35.07
Greatest number, . . . . .	185	142	-43	-23.24
Excess of greatest over smallest number, .	51	55	+4	+7.84

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	139	1	140	139	1	140
February, . . . . .	154	1	155	139	1	140
March, . . . . .	156	1	157	140	1	141
April, . . . . .	164	1	165	134	1	135
May, . . . . .	165	1	166	134	1	135
June, . . . . .	168	1	169	104	1	105
July, . . . . .	180	-	180	121	1	122

## DYESTUFFS — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	176	-	176	109	1	110
September, . . . . .	178	-	178	100	1	101
October, . . . . .	178	-	178	100	1	101
November, . . . . .	150	-	150	118	2	120
December, . . . . .	153	-	153	93	2	95

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$88,732	\$63,458	—\$25,274	—28.48
Average yearly earnings, . . . . .	\$41.05	\$24.45	—16.60	—40.44

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	3	-	3	-	-	-
\$5 but under \$6, . . . . .	1	-	1	-	-	-
\$6 but under \$7, . . . . .	4	-	4	-	2	2
\$7 but under \$8, . . . . .	12	-	12	4	-	4
\$8 but under \$9, . . . . .	7	-	7	1	-	1
\$9 but under \$10, . . . . .	59	-	59	62	-	62
\$10 but under \$12, . . . . .	60	-	60	39	-	39
\$12 but under \$15, . . . . .	25	-	25	25	-	25
\$15 but under \$20, . . . . .	14	-	14	7	-	7
\$20 and over, . . . . .	1	-	1	1	-	1
TOTALS, . . . . .	186	-	186	139	2	141

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	59.00	49.40	—9.60	—16.27
Average number of days in operation, . . . . .	272.53	252.01	—20.52	—7.53

**EARTHEN, PLASTER, AND STONE WARE. 1892, 1893.**  
**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . .	7	7	=	=
Number of private firms, . . . . .	6	6	=	=
Number of partners, . . . . .	10	10	=	=
Males, . . . . .	10	10	=	=
Number of corporations, . . . . .	1	1	=	=
Number of stockholders, . . . . .	14	14	=	=
Males, . . . . .	11	11	=	=
Females, . . . . .	3	3	=	=
Aggregates: partners and stockholders, .	24	24	=	=

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$399,050	\$398,900	-\$81	-0.02

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$92,621	\$87,592	-\$5,029	-5.43

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$348,787	\$324,436	-\$24,351	-6.98

**EARTHEN, PLASTER, AND STONE WARE—1892, 1893**  
— Continued.

**PERSONS EMPLOYED.**

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	302	322	+20	+6.62
Smallest number, . . . . .	208	228	+18	+8.65
Greatest number, . . . . .	369	416	+47	+12.74
Excess of greatest over smallest number, .	161	190	+29	+18.01

**PERSONS EMPLOYED: BY MONTHS.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	187	24	211	220	27	247
February, . . . . .	208	27	235	245	27	272
March, . . . . .	229	27	256	273	28	301
April, . . . . .	258	25	283	262	29	291
May, . . . . .	299	26	325	311	29	340
June, . . . . .	323	33	356	318	35	353
July, . . . . .	327	34	361	347	44	391
August, . . . . .	325	33	358	345	48	393
September, . . . . .	323	35	358	345	42	387
October, . . . . .	285	37	322	294	42	336
November, . . . . .	259	33	292	256	38	294
December, . . . . .	225	32	257	223	36	259
During the entire year,* . .	83	14	97	-	-	-

\* 2 establishments in 1892.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$180,625	\$154,837	—\$25,788	—14.28
Average yearly earnings, . . . . .	598.10	480.86	—117.24	—19.60

## EARTHEN, PLASTER, AND STONE WARE — 1892, 1893

— Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	19	30	49	30	26	56
\$5 but under \$6, . . . . .	3	3	6	9	11	20
\$6 but under \$7, . . . . .	19	2	21	18	8	26
\$7 but under \$8, . . . . .	15	1	16	25	1	26
\$8 but under \$9, . . . . .	40	—	40	29	—	29
\$9 but under \$10, . . . . .	52	1	53	61	1	62
\$10 but under \$12, . . . . .	68	—	68	81	1	82
\$12 but under \$15, . . . . .	43	—	43	40	—	40
\$15 but under \$20, . . . . .	41	—	41	32	—	32
\$20 and over, . . . . .	27	—	27	23	—	23
TOTALS, . . . . .	327	37	364	348	48	396

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	66.71	70.57	+3.86	+5.79
Average number of days in operation, . . .	283.68	277.30	—11.83	—3.93

ELECTRICAL APPARATUS AND APPLIANCES.  
1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (—), OR NO CHANGE (—), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	15	15	=	=
Number of private firms, . . . . .	8	8	=	=
Number of partners, . . . . .	10	12	+2	+20.00
Males, . . . . .	10	12	+2	+20.00
Number of corporations, . . . . .	7	7	=	=
Number of stockholders, . . . . .	249	246	—3	—1.20
Males, . . . . .	206	193	—13	—6.31
Females, . . . . .	33	43	+5	+13.16
Banks, trustees, etc., . . . . .	4	9	+5	+125.00
Syndicates, . . . . .	1	1	=	=
Aggregates : partners and stockholders, .	259	258	—1	—0.39

ELECTRICAL APPARATUS AND APPLIANCES — 1892, 1893  
— Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$10,772,741	\$10,834,900	+\$62,159	+0.58

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$3,504,241	\$2,423,008	-\$1,081,143	-30.85

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$8,189,605	\$4,813,570	-\$3,376,035	-41.22

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	4,080	3,643	-446	-10.91
Smallest number, . . . . .	3,632	2,340	-1,292	-35.57
Greatest number, . . . . .	4,478	4,022	+144	+3.22
Excess of greatest over smallest number, .	846	2,282	+1,436	+169.74

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	3,570	356	3,926	3,600	331	3,931
February, . . . . .	3,555	365	3,920	3,576	314	3,890
March, . . . . .	3,631	384	4,015	3,739	316	4,055
April, . . . . .	3,803	392	4,195	3,894	323	4,217
May, . . . . .	3,944	412	4,356	3,887	305	4,192
June, . . . . .	3,969	416	4,385	3,797	292	4,089
July, . . . . .	4,009	394	4,403	4,246	294	4,540

**ELECTRICAL APPARATUS AND APPLIANCES — 1892, 1893**  
— Concluded.

**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	3,924	392	4,316	3,568	255	3,823
September, . . . . .	3,880	390	4,270	2,518	213	2,731
October, . . . . .	3,400	375	3,775	2,758	228	2,986
November, . . . . .	3,317	362	3,679	2,623	215	2,838
December, . . . . .	3,458	347	3,805	2,234	168	2,402
During the entire year,* . . . . .	52	1	53	24	-	24

\* 4 establishments in 1892; 3 establishments in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$2,344,009	\$1,601,882	—\$742,127	—31.66
Average yearly earnings, . . . . .	573.25	439.72	—133.53	—23.29

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	201	237	438	186	188	374
\$5 but under \$6, . . . . .	166	39	205	166	31	197
\$6 but under \$7, . . . . .	68	11	79	81	11	92
\$7 but under \$8, . . . . .	520	5	525	346	7	353
\$8 but under \$9, . . . . .	614	4	618	446	3	449
\$9 but under \$10, . . . . .	187	2	189	215	1	216
\$10 but under \$12, . . . . .	514	1	515	518	-	518
\$12 but under \$15, . . . . .	609	-	609	596	1	597
\$15 but under \$20, . . . . .	408	-	408	322	-	322
\$20 and over, . . . . .	36	-	36	41	-	41
TOTALS, . . . . .	3,323	299	3,622	2,917	242	3,159

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	73.00	67.00	—6.00	—8.22
Average number of days in operation, . . . . .	305.74	266.77	—38.97	—12.75



ELECTRICAL APPARATUS AND APPLIANCES — 1892, 1893  
— Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$10,772,741	\$10,834,900	+\$62,159	+0.58

## STOCK USED.    AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$3,504,241	\$2,423,098	—\$1,081,143	—30.85

## GOODS MADE.    AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$8,189,605	\$4,813,570	—\$3,376,035	—41.22

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	4,089	3,643	—446	—10.91
Smallest number, . . . . .	3,632	2,340	—1,292	—35.57
Greatest number, . . . . .	4,478	4,022	+144	+3.22
Excess of greatest over smallest number, .	846	2,282	+1,436	+169.74

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	3,570	356	3,926	3,000	331	3,331
February, . . . . .	3,555	365	3,920	3,576	314	3,890
March, . . . . .	3,631	384	4,015	3,739	316	4,055
April, . . . . .	3,803	392	4,195	3,894	323	4,217
May, . . . . .	3,944	412	4,356	3,887	305	4,192
June, . . . . .	3,969	416	4,385	3,797	292	4,089
July, . . . . .	4,009	394	4,403	4,246	294	4,540

ELECTRICAL APPARATUS AND APPLIANCES — 1892, 1893  
— Concluded.

PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	3,924	392	4,316	3,568	256	3,823
September, . . . . .	3,880	390	4,270	2,518	213	2,731
October, . . . . .	3,400	375	3,775	2,758	228	2,986
November, . . . . .	3,317	362	3,679	2,623	215	2,838
December, . . . . .	3,458	347	3,805	2,234	168	2,402
During the entire year,* . . . . .	52	1	53	24	-	24

\* 4 establishments in 1892; 3 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$2,344,009	\$1,601,882	—\$742,127	—31.66
Average yearly earnings, . . . . .	573.25	439.72	—133.53	—23.29

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	201	237	438	186	188	374
\$5 but under \$6, . . . . .	166	39	205	166	31	197
\$6 but under \$7, . . . . .	68	11	79	81	11	92
\$7 but under \$8, . . . . .	520	5	525	346	7	353
\$8 but under \$9, . . . . .	614	4	618	446	3	449
\$9 but under \$10, . . . . .	187	2	189	215	1	216
\$10 but under \$12, . . . . .	514	1	515	518	-	518
\$12 but under \$15, . . . . .	609	-	609	596	1	597
\$15 but under \$20, . . . . .	408	-	408	322	-	322
\$20 and over, . . . . .	36	-	36	41	-	41
TOTALS, . . . . .	3,323	299	3,622	2,917	242	3,159

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	73.00	67.00	—6.00	—8.22
Average number of days in operation, . . . . .	305.74	266.77	—38.97	—12.75

**ELECTROPLATING. 1892, 1893.****ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	9	9	=	=
Number of private firms, . . . . .	9	9	=	=
Number of partners, . . . . .	12	11	-1	-8.33
Males, . . . . .	12	11	-1	-8.33

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$47,600	\$46,100	-\$1,500	-3.15

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$21,971	\$22,927	+\$956	+4.35

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$102,712	\$95,026	-\$7,686	-7.43

ELECTROPLATING — 1892, 1893 — Continued.

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	81	79	—2	—2.47
Smallest number, . . . . .	72	60	—12	—16.67
Greatest number, . . . . .	87	102	+15	+17.24
Excess of greatest over smallest number, .	15	42	+27	+180.00

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	75	3	78	75	5	80
February, . . . . .	72	3	75	75	5	80
March, . . . . .	74	4	78	77	5	82
April, . . . . .	74	4	78	80	4	84
May, . . . . .	76	4	80	91	5	96
June, . . . . .	79	4	83	81	5	86
July, . . . . .	79	4	83	72	5	77
August, . . . . .	82	3	85	68	5	73
September, . . . . .	80	3	83	64	5	69
October, . . . . .	76	3	79	64	5	69
November, . . . . .	74	3	77	62	5	67
December, . . . . .	71	3	74	60	5	65
During the entire year,* . . .	16	—	16	5	—	5

\* 4 establishments in 1892; 2 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$40,477	\$39,720	—\$757	—1.87
Average yearly earnings, . . . . .	499.72	502.78	+3.06	+0.61

## ELECTROPLATING — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	3	-	3	7	-	7
\$5 but under \$6, . . . . .	2	-	2	2	-	2
\$6 but under \$7, . . . . .	5	3	8	3	2	5
\$7 but under \$8, . . . . .	4	-	4	5	1	6
\$8 but under \$9, . . . . .	3	1	4	10	-	10
\$9 but under \$10, . . . . .	16	-	16	13	2	15
\$10 but under \$12, . . . . .	15	-	15	11	-	11
\$12 but under \$15, . . . . .	14	-	14	29	-	29
\$15 but under \$20, . . . . .	17	-	17	14	-	14
\$20 and over, . . . . .	2	-	2	2	-	2
TOTALS, . . . . .	81	4	85	96	5	101

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	60.89	53.83	-7.56	-12.42
Average number of days in operation, . . .	290.57	278.96	-11.61	-4.00

EMERY AND SAND PAPER AND CLOTH, ETC.  
1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	10	10	=	=
Number of private firms, . . . . .	2	2	=	=
Number of partners, . . . . .	3	3	=	=
Males, . . . . .	3	3	=	=
Number of corporations, . . . . .	3	3	=	=
Number of stockholders, . . . . .	104	105	+1	+0.96
Males, . . . . .	88	87	-1	-1.14
Females, . . . . .	15	17	+2	+13.33
Banks, trustees, etc., . . . . .	1	1	=	=
Aggregates: partners and stockholders, . .	107	108	+1	+0.93

**EMERY AND SAND PAPER AND CLOTH, ETC. — 1892, 1893**  
— Continued.

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$773,853	\$789,965	+\$16,112	+2.08

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$366,566	\$301,649	—\$64,917	—17.71

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$847,758	\$645,339	—\$202,419	—23.88

**PERSONS EMPLOYED.**

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	294	288	—6	—2.04
Smallest number, . . . . .	271	185	—86	—31.73
Greatest number, . . . . .	319	370	+51	+16.00
Excess of greatest over smallest number, .	48	185	+137	+285.42

**PERSONS EMPLOYED: BY MONTHS.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	277	10	287	308	10	318
February, . . . . .	278	10	288	314	12	326
March, . . . . .	285	10	295	308	12	320
April, . . . . .	284	10	294	310	11	321
May, . . . . .	280	10	290	308	11	319
June, . . . . .	284	10	294	311	10	321
July, . . . . .	290	11	301	329	13	342

**EMERY AND SAND PAPER AND CLOTH, ETC. — 1892, 1893**  
— Concluded.

**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	293	11	304	275	11	286
September, . . . . .	294	11	305	209	3	212
October, . . . . .	289	11	300	206	10	216
November, . . . . .	285	10	295	204	10	214
December, . . . . .	291	11	302	223	9	232
During the entire year,* . . . . .	60	-	60	-	-	-

\* 3 establishments in 1892.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$153,435	\$140,969	-\$17,466	-11.02
Average yearly earnings, . . . . .	538.89	489.48	-49.41	-9.17

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	4	1	5	18	1	19
\$5 but under \$6, . . . . .	3	7	10	12	5	17
\$6 but under \$7, . . . . .	5	1	6	5	4	9
\$7 but under \$8, . . . . .	10	-	10	23	-	23
\$8 but under \$9, . . . . .	5	-	5	36	-	36
\$9 but under \$10, . . . . .	83	1	84	85	1	86
\$10 but under \$12, . . . . .	105	-	105	114	-	114
\$12 but under \$15, . . . . .	46	1	47	48	1	49
\$15 but under \$20, . . . . .	33	-	33	32	-	32
\$20 and over, . . . . .	8	-	8	8	-	8
TOTALS, . . . . .	302	11	313	381	12	393

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	83.10	58.40	-24.70	-29.72
Average number of days in operation, . . . . .	299.48	264.78	-34.70	-11.59

FANCY ARTICLES, ETC. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	5	5	=	=
Number of private firms, . . . . .	4	4	=	=
Number of partners, . . . . .	7	7	=	=
Males, . . . . .	7	7	=	=
Number of corporations, . . . . .	1	1	=	=
Number of stockholders, . . . . .	7	7	=	=
Males, . . . . .	4	4	=	=
Females, . . . . .	3	3	=	=
Aggregates : partners and stockholders, .	14	14	=	=

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$60,000	\$62,408	+\$2,408	+4.11

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$56,879	\$51,945	-\$4,934	-8.67

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$147,641	\$133,810	-\$13,831	-9.37



## FANCY ARTICLES, ETC. — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	105	96	-9	-8.57
Smallest number, . . . . .	98	88	-10	-10.20
Greatest number, . . . . .	115	106	-10	-8.70
Excess of greatest over smallest number, .	17	17	*=	*=

\* No change.

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	30	76	106	30	70	100
February, . . . . .	30	76	106	30	72	102
March, . . . . .	31	75	106	29	73	102
April, . . . . .	30	76	106	28	71	99
May, . . . . .	30	76	106	28	73	101
June, . . . . .	29	69	98	27	66	93
July, . . . . .	31	69	100	27	63	90
August, . . . . .	31	69	100	26	65	91
September, . . . . .	30	72	102	26	67	93
October, . . . . .	31	75	106	27	70	97
November, . . . . .	34	78	112	27	68	95
December, . . . . .	35	79	114	26	67	93
During the entire year,* . .	13	43	56	-	-	-

\* 2 establishments in 1892.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$40,715	\$36,194	-\$4,521	-11.10
Average yearly earnings, . . . . .	887.76	877.02	-10.74	-2.77

FANCY ARTICLES, ETC. — 1892, 1893 — Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	6	23	29	5	19	24
\$5 but under \$6, . . . .	4	16	20	3	15	18
\$6 but under \$7, . . . .	5	19	24	2	20	22
\$7 but under \$8, . . . .	-	12	12	1	15	16
\$8 but under \$9, . . . .	-	4	4	-	4	4
\$9 but under \$10, . . . .	2	2	4	2	1	3
\$10 but under \$12, . . . .	3	-	3	6	1	7
\$12 but under \$15, . . . .	11	-	11	6	-	6
\$15 but under \$20, . . . .	4	-	4	5	-	5
\$20 and over, . . . . .	-	-	-	-	-	-
TOTALS, . . . . .	35	78	113	30	75	105

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	80.00	69.20	-10.80	-13.50
Average number of days in operation, . . .	292.24	281.06	-11.18	-3.83

FERTILIZERS. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	5	5	=	=
Number of private firms, . . . . .	5	5	=	=
Number of partners, . . . . .	7	7	=	=
Males, . . . . .	7	7	=	=

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$81,267	\$82,100	+\$833	+1.03

## FERTILIZERS — 1892, 1893 — Continued.

## STOCK USED. AGGREGATE VALUES.

Stock Used.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$50,089	\$64,739	+\$5,650	+9.56

## GOODS MADE. AGGREGATE VALUES.

Goods Made.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$94,204	\$109,801	+\$15,597	+16.56

## PERSONS EMPLOYED.

Persons Employed.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	33	31	—2	—6.06
Smallest number, . . . . .	29	23	—6	—20.69
Greatest number, . . . . .	35	36	+1	+2.86
Excess of greatest over smallest number, .	6	13	+7	+116.67

## PERSONS EMPLOYED: BY MONTHS.

Months.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	34	—	34	35	—	35
February, . . . . .	34	—	34	33	—	33
March, . . . . .	34	—	34	34	—	34
April, . . . . .	35	—	35	35	—	35
May, . . . . .	33	—	33	35	—	35
June, . . . . .	32	—	32	27	—	27
July, . . . . .	30	—	30	25	—	25

## FERTILIZERS — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	30	-	30	23	-	23
September, . . . . .	31	-	31	26	-	26
October, . . . . .	34	-	34	30	-	30
November, . . . . .	34	-	34	30	-	30
December, . . . . .	33	-	33	30	-	30
During the entire year,* . .	13	-	13	8	-	8

\* 1 establishment in 1892; 2 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$16,204	\$14,416	—\$1,848	—11.36
Average yearly earnings, . . . . .	492.85	465.03	—27.82	—5.64

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals .
Under \$5, . . . . .	-	-	-	1	-	1 :
\$5 but under \$6, . . . . .	-	-	-	-	-	- :
\$6 but under \$7, . . . . .	1	-	1	1	-	1 :
\$7 but under \$8, . . . . .	-	-	-	2	-	2 .
\$8 but under \$9, . . . . .	7	-	7	8	-	8 .
\$9 but under \$10, . . . . .	15	-	15	13	-	13 :
\$10 but under \$12, . . . . .	6	-	6	6	-	6 :
\$12 but under \$15, . . . . .	5	-	5	4	-	4
\$15 but under \$20, . . . . .	1	-	1	1	-	1
\$20 and over, . . . . .	-	-	-	-	-	-
TOTALS, . . . . .	35	-	35	36	-	36

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	55.00	54.00	—1.00	—1.82
Average number of days in operation, . .	305.09	302.90	—2.19	—0.72

## FINE ARTS AND TAXIDERMY. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	3	3	=	=
Number of private firms, . . . . .	2	2	=	=
Number of partners, . . . . .	3	3	=	=
Males, . . . . .	3	3	=	=
Number of corporations, . . . . .	1	1	=	=
Number of stockholders, . . . . .	11	10	-1	-9.09
Males, . . . . .	9	9	=	=
Females, . . . . .	1	1	=	=
Banks, trustees, etc., . . . . .	1	-	-1	-100.00
Aggregates: partners and stockholders, .	14	13	-1	-7.14

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$16,500	\$21,500	+\$5,000	+30.30

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$3,375	\$3,145	-\$230	-6.51

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$19,800	\$23,498	+\$3,698	+18.65

FINE ARTS AND TAXIDERMY — 1892, 1893 — Continued.

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	12	12	*=	*=
Smallest number, . . . . .	8	10	+2	+25.00
Greatest number, . . . . .	17	18	+1	+5.88
Excess of greatest over smallest number, .	9	8	—1	—11.11

\* No change.

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	9	3	12	12	1	13
February, . . . . .	9	3	12	10	1	11
March, . . . . .	9	3	12	11	2	13
April, . . . . .	9	3	12	10	2	12
May, . . . . .	9	2	11	9	2	11
June, . . . . .	7	2	9	9	2	11
July, . . . . .	7	1	8	9	1	10
August, . . . . .	7	1	8	9	1	10
September, . . . . .	7	3	10	9	1	10
October, . . . . .	10	3	13	12	2	14
November, . . . . .	11	3	14	12	2	14
December, . . . . .	12	3	15	13	2	15

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$9,024	\$7,058	—\$1,966	—21.79
Average yearly earnings, . . . . .	752.00	588.17	—163.83	—21.79

## FINE ARTS AND TAXIDERMY—1892, 1893—Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	1	1	2	1	1	2
\$5 but under \$6, . . . . .	-	2	2	-	-	-
\$6 but under \$7, . . . . .	-	1	1	1	2	3
\$7 but under \$8, . . . . .	1	-	1	-	-	-
\$8 but under \$9, . . . . .	-	-	-	-	-	-
\$9 but under \$10, . . . . .	-	-	-	2	-	2
\$10 but under \$12, . . . . .	-	-	-	-	-	-
\$12 but under \$15, . . . . .	-	-	-	2	-	2
\$15 but under \$20, . . . . .	10	-	10	7	-	7
\$20 and over, . . . . .	1	-	1	2	-	2
TOTALS, . . . . .	18	4	17	15	3	18

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	90.00	75.00	-15.00	-16.67
Average number of days in operation, . . .	303.50	305.00	+1.50	+0.49

## FLAX, HEMP, JUTE, AND LINEN GOODS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	7	7	=	=
Number of private firms, . . . . .	4	4	=	=
Number of partners, . . . . .	11	11	=	=
Males, . . . . .	11	11	=	=
Number of corporations, . . . . .	3	3	=	=
Number of stockholders, . . . . .	58	63	+5	+8.62
Males, . . . . .	24	27	+3	+12.50
Females, . . . . .	28	27	-1	-3.57
Banks, trustees, etc., . . . . .	6	9	+3	+50.00
Aggregates: partners and stockholders, . .	69	74	+5	+7.26

**FLAX, HEMP, JUTE, AND LINEN GOODS — 1892, 1893**  
— Continued.

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . .	\$2,581,300	\$2,485,882	—\$95,918	—3.72

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . .	\$2,001,258	\$2,135,182	+\$133,924	+6.69

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$2,929,281	\$3,059,759	+\$130,478	+4.45

**PERSONS EMPLOYED.**

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	2,061	2,141	+80	+3.88
Smallest number, . . . . .	1,832	1,951	+119	+6.50
Greatest number, . . . . .	2,250	2,294	+44	+1.96
Excess of greatest over smallest number, .	418	443	+25	+6.00

**PERSONS EMPLOYED: BY MONTHS.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	991	868	1,859	1,175	1,069	2,244
February, . . . . .	971	874	1,845	1,175	1,064	2,239
March, . . . . .	1,006	883	1,888	1,178	1,080	2,258
April, . . . . .	1,084	930	2,014	1,165	1,059	2,224
May, . . . . .	1,134	938	2,072	1,154	1,058	2,212
June, . . . . .	1,199	984	2,183	1,156	1,066	2,222
July, . . . . .	1,189	1,010	2,199	1,077	1,044	2,121



**FLAX, HEMP, JUTE, AND LINEN GOODS — 1892, 1893**  
— Concluded.

**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	1,226	992	2,218	1,079	1,039	2,118
September, . . . . .	1,205	999	2,204	1,090	1,022	2,112
October, . . . . .	1,121	997	2,118	1,006	977	1,983
November, . . . . .	1,086	977	2,063	1,006	968	1,974
December, . . . . .	1,076	967	2,043	1,012	970	1,982
During the entire year,* . .	6	2	8	-	-	-

\* 1 establishment in 1892.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$650,087	\$650,127	+\$40	+0.01
Average yearly earnings, . . . . .	315.42	303.66	-11.76	-3.73

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	227	407	634	236	420	656
\$5 but under \$6, . . . . .	118	319	437	96	389	485
\$6 but under \$7, . . . . .	144	224	368	139	223	362
\$7 but under \$8, . . . . .	220	84	304	187	43	230
\$8 but under \$9, . . . . .	86	18	104	67	9	76
\$9 but under \$10, . . . . .	188	-	188	146	3	149
\$10 but under \$12, . . . . .	98	-	98	76	-	76
\$12 but under \$15, . . . . .	98	-	98	97	-	97
\$15 but under \$20, . . . . .	34	-	34	32	-	32
\$20 and over, . . . . .	3	-	3	2	-	2
TOTALS, . . . . .	1,216	1,062	2,268	1,078	1,087	2,165

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	81.00	76.86	-4.14	-5.11
Average number of days in operation, . . .	298.80	259.72	-39.08	-13.08

## FOOD PREPARATIONS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	300	300	=	=
Number of private firms, . . . . .	265	262	-3	-1.13
Number of partners, . . . . .	378	376	-2	-0.53
Males, . . . . .	369	370	+1	+0.27
Females, . . . . .	6	3	-3	-50.00
Special, . . . . .	3	3	=	=
Number of corporations, . . . . .	35	38	+3	+8.57
Number of stockholders, . . . . .	530	595	+15	+2.59
Males, . . . . .	478	486	+8	+1.67
Females, . . . . .	92	94	+2	+2.17
Banks, trustees, etc., . . . . .	5	9	+4	+80.00
Syndicates, . . . . .	5	6	+1	+20.00
Aggregates: partners and stockholders, .	968	971	+13	+1.36

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$17,608,676	\$16,716,000	-\$892,676	-5.07

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$65,810,561	\$63,570,337	-\$2,240,224	-3.40

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$76,627,091	\$74,169,036	-\$2,458,055	-3.21

FOOD PREPARATIONS — 1892, 1893 — Continued.  
PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	3,319	7,801	—518	—8.23
Smallest number, . . . . .	6,611	5,932	—679	—10.27
Greatest number, . . . . .	11,185	10,721	—464	—4.15
Excess of greatest over smallest number, .	4,574	4,789	+215	+4.70

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	6,627	1,561	8,188	7,184	1,531	8,715
February, . . . . .	6,915	1,598	8,513	6,081	1,568	7,649
March, . . . . .	6,254	1,647	7,901	5,902	1,627	7,529
April, . . . . .	6,157	1,702	7,859	5,908	1,663	7,571
May, . . . . .	6,219	1,815	8,034	6,015	1,719	7,734
June, . . . . .	6,478	1,879	8,357	6,040	1,740	7,780
July, . . . . .	6,557	1,875	8,432	5,950	1,829	7,779
August, . . . . .	6,664	1,865	8,529	5,889	1,790	7,679
September, . . . . .	6,688	2,018	8,706	5,894	1,938	7,832
October, . . . . .	5,504	2,102	7,606	5,779	1,884	7,663
November, . . . . .	6,395	2,108	8,498	5,737	1,829	7,566
December, . . . . .	6,245	1,923	8,168	5,851	1,694	7,545
During the entire year,* . .	744	111	855	712	135	847

\* 129 establishments in 1892; 123 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$4,086,756	\$3,684,017	—\$402,739	—9.85
Average yearly earnings, . . . . .	491.26	472.25	—19.01	—3.87

FOOD PREPARATIONS — 1892, 1893 — Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	235	1,138	1,373	223	981	1,204
\$5 but under \$6, . . . . .	167	609	776	158	499	657
\$6 but under \$7, . . . . .	371	299	670	405	427	832
\$7 but under \$8, . . . . .	305	169	474	308	169	477
\$8 but under \$9, . . . . .	400	59	459	362	61	423
\$9 but under \$10, . . . . .	2,153	37	2,190	2,408	32	2,440
\$10 but under \$12, . . . . .	2,286	25	2,311	1,896	24	1,920
\$12 but under \$15, . . . . .	1,649	23	1,672	1,667	17	1,684
\$15 but under \$20, . . . . .	1,017	4	1,021	751	1	752
\$20 and over, . . . . .	222	-	222	181	-	181
TOTALS, . . . . .	8,805	2,328	11,133	8,859	2,211	10,670

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	63.27	59.80	-3.47	-5.48
Average number of days in operation, . . . . .	304.42	298.64	-5.78	-1.90

FURNITURE. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . . . .	121	121	=	=
Number of private firms, . . . . .	110	109	-1	-0.91
Number of partners, . . . . .	197	193	-4	-2.03
Males, . . . . .	186	182	-4	-2.15
Females, . . . . .	5	5	=	=
Special, . . . . .	5	5	=	=
Estates, . . . . .	1	1	=	=
Number of corporations, . . . . .	11	12	+1	+9.09
Number of stockholders, . . . . .	342	356	+14	+4.09
Males, . . . . .	233	200	-33	-14.16
Females, . . . . .	109	111	+2	+1.83
Banks, trustees, etc., . . . . .	-	45	+45	-
Aggregates: partners and stockholders, . . . . .	539	549	+10	+1.86

## FURNITURE — 1892, 1893 — Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . .	\$5,436,664	\$5,386,102	—\$50,562	—0.93

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . .	\$4,654,391	\$4,085,338	—\$569,053	—12.23

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$8,693,400	\$7,693,186	—\$995,274	—11.45

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	4,095	3,633	—462	—11.28
Smallest number, . . . . .	3,568	2,901	—667	—18.69
Greatest number, . . . . .	4,617	4,270	—347	—7.52
Excess of greatest over smallest number, .	1,049	1,369	+320	+30.51

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	3,500	419	3,919	3,440	411	3,851
February, . . . . .	3,545	406	3,951	3,454	406	3,859
March, . . . . .	3,734	419	4,153	3,449	425	3,874
April, . . . . .	3,768	434	4,202	3,493	433	3,926
May, . . . . .	3,736	434	4,170	3,476	444	3,920
June, . . . . .	3,721	439	4,160	3,476	438	3,914
July, . . . . .	3,560	391	3,951	3,198	365	3,563

FURNITURE — 1892, 1893 — Concluded.

PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	3,548	389	3,937	2,999	364	3,363
September, . . . . .	3,728	423	4,151	2,904	378	3,282
October, . . . . .	3,743	437	4,180	3,062	383	3,445
November, . . . . .	3,760	445	4,205	3,007	383	3,390
December, . . . . .	3,607	423	4,030	2,854	335	3,189
During the entire year,* . .	663	53	716	350	5	355

\* 30 establishments in 1892; 18 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$2,063,842	\$1,757,435	—\$301,407	—14.64
Average yearly earnings, . . . . .	502.77	453.74	—19.03	—3.79

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	203	104	307	115	102	217
\$5 but under \$6, . . . . .	135	49	184	136	53	189
\$6 but under \$7, . . . . .	147	69	216	151	95	246
\$7 but under \$8, . . . . .	239	86	325	255	70	325
\$8 but under \$9, . . . . .	299	63	362	284	63	347
\$9 but under \$10, . . . . .	511	51	562	611	35	646
\$10 but under \$12, . . . . .	818	56	874	714	47	761
\$12 but under \$15, . . . . .	900	7	907	813	6	819
\$15 but under \$20, . . . . .	660	1	661	521	4	525
\$20 and over, . . . . .	126	1	127	94	—	94
TOTALS, . . . . .	4,038	487	4,525	3,694	475	4,169

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	68.12	58.82	—9.30	—13.65
Average number of days in operation, . . .	297.67	286.37	—11.30	—3.80

## GLASS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	8	8	=	=
Number of private firms, . . . . .	6	6	=	=
Number of partners, . . . . .	8	8	=	=
Males, . . . . .	7	7	=	=
Females, . . . . .	1	1	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	26	29	+3	+11.54
Males, . . . . .	25	27	+2	+8.00
Females, . . . . .	1	1	=	=
Banks, trustees, etc., . . . . .	-	1	+1	-
Aggregates: partners and stockholders, .	34	37	+3	+8.82

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$499,500	\$530,500	+\$31,000	+6.21

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$126,038	\$91,514	-\$34,524	-27.39

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$549,462	\$444,924	-\$104,538	-19.03

GLASS — 1892, 1893 — Continued.

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	501	348	—153	—30.54
Smallest number, . . . . .	422	248	—174	—41.23
Greatest number, . . . . .	561	432	—129	—22.99
Excess of greatest over smallest number, .	139	184	+45	+32.37

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	443	27	470	384	26	409
February, . . . . .	445	27	472	377	25	402
March, . . . . .	454	29	483	379	26	405
April, . . . . .	453	29	482	388	26	414
May, . . . . .	453	29	482	386	26	412
June, . . . . .	443	29	472	375	24	399
July, . . . . .	434	29	463	254	15	269
August, . . . . .	468	33	501	251	15	266
September, . . . . .	506	36	542	267	16	283
October, . . . . .	507	36	543	290	16	306
November, . . . . .	514	35	549	290	16	306
December, . . . . .	512	36	548	289	15	304
During the entire year,* . .	—	—	—	18	—	18

\* 1 establishment in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$273,077	\$211,521	—\$61,556	—22.54
Average yearly earnings, . . . . .	545.06	607.82	+62.76	+11.61



## GLASS — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	56	26	82	43	14	57
\$5 but under \$6, . . . . .	32	4	36	22	4	26
\$6 but under \$7, . . . . .	32	4	36	21	5	26
\$7 but under \$8, . . . . .	35	—	35	24	1	25
\$8 but under \$9, . . . . .	20	—	20	33	—	33
\$9 but under \$10, . . . . .	24	1	25	27	1	28
\$10 but under \$12, . . . . .	36	1	37	54	1	55
\$12 but under \$15, . . . . .	62	—	62	59	—	59
\$15 but under \$20, . . . . .	140	—	140	84	—	84
\$20 and over, . . . . .	77	—	77	40	—	40
TOTALS, . . . . .	514	36	550	407	26	433

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	71.88	67.88	—4.00	—5.56
Average number of days in operation, . . .	294.11	242.32	—51.79	—17.61

## GLUE, ISINGLASS, AND STARCH. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	, INCREASE (+), DE- CREASE (—), OR NO CHANGE (—), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	18	18	=	=
Number of private firms, . . . . .	14	14	=	=
Number of partners, . . . . .	27	29	+2	+7.41
Males, . . . . .	25	26	+1	+4.00
Females, . . . . .	1	2	+1	+100.00
Estates, . . . . .	1	1	=	=
Number of corporations, . . . . .	4	4	=	=
Number of stockholders, . . . . .	38	39	+1	+2.63
Males, . . . . .	35	35	=	=
Females, . . . . .	3	4	+1	+33.33
Aggregates: partners and stockholders, .	65	68	+3	+4.62

GLUE, ISINGLASS, AND STARCH — 1892, 1893 — Continued.  
CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$1,144,132	\$1,125,446	—\$18,686	—1.63

STOCK USED.    AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$701,027	\$747,412	+\$46,385	+6.62

GOODS MADE.    AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,163,977	\$1,284,525	+\$120,548	+10.36

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	438	428	—10	—2.28
Smallest number, . . . . .	393	355	—38	—9.67
Greatest number, . . . . .	661	629	—32	—4.84
Excess of greatest over smallest number, .	268	274	+6	+2.24

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	550	60	610	554	64	618
February, . . . . .	559	63	622	552	64	616
March, . . . . .	507	66	573	466	58	524
April, . . . . .	402	53	455	390	44	434
May, . . . . .	386	47	433	395	36	431
June, . . . . .	291	32	323	311	26	337
July, . . . . .	278	21	294	258	17	275

GLUE, ISINGLASS, AND STARCH — 1892, 1893 — Concluded.

PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	224	16	240	218	10	228
September, . . . . .	228	21	249	242	16	257
October, . . . . .	362	38	400	384	35	419
November, . . . . .	400	44	444	364	47	411
December, . . . . .	536	61	597	491	53	544
During the entire year,* . . . . .	7	-	7	6	-	6

\* 1 establishment in 1892 and in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$196,269	\$192,927	-\$3,342	-1.70
Average yearly earnings, . . . . .	448.10	450.76	+2.66	+0.59

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	2	38	40	2	27	29
\$5 but under \$6, . . . . .	19	2	21	6	1	7
\$6 but under \$7, . . . . .	36	2	38	20	2	22
\$7 but under \$8, . . . . .	69	20	89	87	18	105
\$8 but under \$9, . . . . .	92	1	93	99	2	101
\$9 but under \$10, . . . . .	145	-	145	129	-	129
\$10 but under \$12, . . . . .	150	-	150	169	-	169
\$12 but under \$15, . . . . .	47	-	47	44	-	44
\$15 but under \$20, . . . . .	20	-	20	25	-	25
\$20 and over, . . . . .	2	-	2	4	-	4
TOTALS, . . . . .	582	63	645	585	50	635

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	76.50	70.22	-6.28	-8.21
Average number of days in operation, . . . . .	234.06	232.85	-1.21	-0.52

**HAIR WORK (ANIMAL AND HUMAN). 1892, 1893.****ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	9	9	=	=
Number of private firms, . . . . .	9	9	=	=
Number of partners, . . . . .	9	9	=	=
Males, . . . . .	8	8	=	=
Females, . . . . .	1	1	=	=

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$204,500	\$224,500	+\$20,000	+9.78

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$416,316	\$277,225	-\$139,091	-33.41

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$644,148	\$474,800	-\$169,348	-26.37

**PERSONS EMPLOYED.**

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	199	183	-16	-8.04
Smallest number, . . . . .	172	157	-15	-8.72
Greatest number, . . . . .	224	213	-11	-4.91
Excess of greatest over smallest number, .	52	56	+4	+7.69

## HAIR WORK (ANIMAL AND HUMAN)—1892, 1893—Continued.

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	90	98	188	98	104	202
February, . . . . .	91	104	195	100	97	197
March, . . . . .	102	103	205	100	103	203
April, . . . . .	97	103	200	100	108	208
May, . . . . .	99	103	202	90	94	184
June, . . . . .	99	92	191	89	96	185
July, . . . . .	99	95	194	87	91	178
August, . . . . .	97	104	201	83	89	172
September, . . . . .	91	106	197	79	85	164
October, . . . . .	91	108	199	77	90	167
November, . . . . .	91	112	203	75	88	163
December, . . . . .	88	113	201	76	86	162
During the entire year,* . .	3	31	34	2	8	10

\* 4 establishments in 1892; 3 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$76,288	\$62,835	—\$13,453	—17.65
Average yearly earnings, . . . . .	383.36	343.36	—40.00	—10.43

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	9	33	42	13	81	94
\$5 but under \$6, . . . . .	4	53	57	3	5	8
\$6 but under \$7, . . . . .	4	8	12	5	5	10
\$7 but under \$8, . . . . .	5	5	10	11	3	14
\$8 but under \$9, . . . . .	4	3	7	5	2	7
\$9 but under \$10, . . . . .	10	1	11	26	5	31
\$10 but under \$12, . . . . .	25	6	31	27	3	30
\$12 but under \$15, . . . . .	31	—	31	10	1	11
\$15 but under \$20, . . . . .	15	—	15	4	1	5
\$20 and over, . . . . .	8	—	8	1	—	1
TOTALS, . . . . .	110	109	219	105	106	211

## HAIR WORK (ANIMAL AND HUMAN) — 1892, 1893 — Concluded.

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	58.33	48.11	-10.22	-17.52
Average number of days in operation, . .	299.02	278.00	-21.02	-7.03

## HOSE: RUBBER, LINEN, ETC. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . .	3	3	=	=
Number of private firms, . . . . .	1	1	=	=
Number of partners, . . . . .	1	1	=	=
Males, . . . . .	1	1	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	94	112	+18	+19.15
Males, . . . . .	77	86	+9	+11.69
Females, . . . . .	12	21	+9	+75.00
Banks, trustees, etc., . . . . .	5	5	=	=
Aggregates: partners and stockholders, .	95	113	+18	+18.95

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$755,681	\$705,000	-\$50,681	-6.71

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$535,135	\$454,036	-\$81,099	-15.15

## HOSE: RUBBER, LINEN, ETC. — 1892, 1893 — Continued.

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$838,650	\$786,483	—\$52,167	—6.22

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	240	283	+43	+17.92
Smallest number, . . . . .	200	210	+10	+5.00
Greatest number, . . . . .	293	363	+70	+23.89
Excess of greatest over smallest number, .	93	153	+60	+64.52

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	194	50	244	252	57	309
February, . . . . .	202	52	254	264	61	325
March, . . . . .	208	52	260	274	53	327
April, . . . . .	200	49	249	309	52	361
May, . . . . .	186	51	237	284	41	325
June, . . . . .	183	48	231	278	46	324
July, . . . . .	184	48	227	218	45	263
August, . . . . .	175	34	209	172	38	210
September, . . . . .	167	34	201	181	34	215
October, . . . . .	180	35	215	187	35	222
November, . . . . .	227	38	265	193	43	236
December, . . . . .	240	48	288	223	53	276

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$96,658	\$106,435	+\$9,777	+10.12
Average yearly earnings, . . . . .	402.74	376.10	—26.64	—6.61

## HOSE: RUBBER, LINEN, ETC. — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	13	30	43	31	28	59
\$5 but under \$6, . . . . .	16	19	35	11	16	27
\$6 but under \$7, . . . . .	8	7	15	6	5	11
\$7 but under \$8, . . . . .	13	4	17	7	3	10
\$8 but under \$9, . . . . .	23	-	23	24	-	24
\$9 but under \$10, . . . . .	39	1	40	34	-	34
\$10 but under \$12, . . . . .	40	2	42	33	2	35
\$12 but under \$15, . . . . .	39	1	40	49	1	50
\$15 but under \$20, . . . . .	31	-	31	39	-	39
\$20 and over, . . . . .	8	-	8	9	-	9
TOTALS, . . . . .	230	64	294	243	55	298

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	75.00	56.67	-18.33	-24.44
Average number of days in operation, . . .	296.21	274.42	-20.79	-7.04

## HOSIERY AND KNIT GOODS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	42	42	=	=
Number of private firms, . . . . .	27	28	+1	+3.70
Number of partners, . . . . .	50	46	-4	-8.00
Males, . . . . .	48	43	-5	-10.42
Females, . . . . .	2	3	+1	+50.00
Number of corporations, . . . . .	15	14	-1	-6.67
Number of stockholders, . . . . .	1,166	1,214	+48	+4.12
Males, . . . . .	584	595	+11	+1.88
Females, . . . . .	355	383	+28	+7.89
Banks, trustees, etc., . . . . .	226	235	+9	+3.98
Syndicates, . . . . .	1	1	=	=
Aggregates: partners and stockholders, .	1,216	1,260	+44	+3.62



## HOSIERY AND KNIT GOODS — 1892, 1893 — Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$3,590,745	\$4,515,560	+\$924,815	+25.76

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$3,079,140	\$2,763,655	—\$315,485	—10.25

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$5,913,402	\$5,216,381	—\$697,021	—11.79

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	4,711	4,757	+46	+0.98
Smallest number, . . . . .	3,820	3,685	—135	—3.53
Greatest number, . . . . .	5,771	5,733	—38	—0.66
Excess of greatest over smallest number, .	1,951	2,048	+97	+4.97

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	1,355	3,757	5,112	1,426	3,837	5,263
February, . . . . .	1,342	3,651	4,993	1,461	3,888	5,349
March, . . . . .	1,262	3,551	4,813	1,485	4,066	5,551
April, . . . . .	1,244	3,411	4,655	1,513	3,972	5,485
May, . . . . .	1,254	3,830	4,584	1,444	3,822	5,266
June, . . . . .	1,234	3,222	4,456	1,398	3,638	5,036
July, . . . . .	1,243	2,974	4,217	1,345	3,359	4,704

HOSIERY AND KNIT GOODS — 1892, 1893 — Concluded.

PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	1,219	2,991	4,210	1,082	2,765	3,847
September, . . . . .	1,244	3,137	4,381	1,027	2,803	3,830
October, . . . . .	1,350	3,525	4,875	1,112	3,084	4,196
November, . . . . .	1,415	3,708	5,123	1,118	3,147	4,260
December, . . . . .	1,387	3,728	5,115	1,150	3,144	4,294
During the entire year,* . . . . .	5	58	58	14	16	30

\* 2 establishments in 1892; 4 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,632,068	\$1,525,238	—\$106,830	—6.55
Average yearly earnings, . . . . .	846.44	820.63	—25.81	—7.45

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	184	1,360	1,544	232	1,210	1,442
\$5 but under \$6, . . . . .	142	849	991	105	806	911
\$6 but under \$7, . . . . .	365	817	1,182	283	952	1,235
\$7 but under \$8, . . . . .	173	591	764	206	616	824
\$8 but under \$9, . . . . .	120	308	428	101	331	432
\$9 but under \$10, . . . . .	143	152	295	170	192	362
\$10 but under \$12, . . . . .	192	98	290	221	96	317
\$12 but under \$15, . . . . .	153	31	184	147	16	163
\$15 but under \$20, . . . . .	77	3	80	106	6	112
\$20 and over, . . . . .	30	1	31	32	—	32
TOTALS, . . . . .	1,579	4,210	5,789	1,605	4,225	5,830

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	67.86	67.76	—9.60	—14.25
Average number of days in operation, . . . . .	299.88	281.44	—17.94	—5.99

**INK, MUCILAGE, AND PASTE. 1892, 1893.****ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	9	9	=	=
Number of private firms, . . . . .	9	9	=	=
Number of partners, . . . . .	14	13	-1	-7.14
Males, . . . . .	14	13	-1	-7.14

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$294,000	\$293,000	-\$1,000	-0.34

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$149,290	\$142,248	-\$7,042	-4.72

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$426,966	\$412,973	-\$13,993	-3.25

**PERSONS EMPLOYED.**

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	113	109	-4	-3.54
Smallest number, . . . . .	64	62	-2	-3.13
Greatest number, . . . . .	138	140	+2	+1.45
Excess of greatest over smallest number, .	74	78	+4	+5.41

INK, MUCILAGE, AND PASTE — 1892, 1893 — Continued.  
PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	38	27	65	40	27	67
February, . . . . .	38	27	65	40	26	66
March, . . . . .	76	59	135	78	58	136
April, . . . . .	77	61	138	78	60	138
May, . . . . .	77	61	138	78	61	139
June, . . . . .	75	61	136	78	60	138
July, . . . . .	74	55	129	72	52	124
August, . . . . .	75	56	131	72	50	122
September, . . . . .	76	60	136	73	53	126
October, . . . . .	77	60	137	74	53	127
November, . . . . .	40	28	68	39	24	63
December, . . . . .	40	28	68	38	24	62
During the entire year,* . .	11	1	12	13	1	14

\* 5 establishments in 1892 and in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$48,768	\$47,766	—\$1,002	—2.05
Average yearly earnings, . . . . .	431.58	438.22	+\$6.64	+1.54

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	8	35	33	4	35	39
\$5 but under \$6, . . . . .	7	9	16	7	9	16
\$6 but under \$7, . . . . .	3	5	8	3	5	8
\$7 but under \$8, . . . . .	23	10	33	22	9	31
\$8 but under \$9, . . . . .	5	-	5	5	-	5
\$9 but under \$10, . . . . .	5	1	6	6	1	7
\$10 but under \$12, . . . . .	9	-	9	9	-	9
\$12 but under \$15, . . . . .	11	-	11	9	-	9
\$15 but under \$20, . . . . .	7	1	8	10	1	11
\$20 and over, . . . . .	22	-	22	3	-	3
TOTALS, . . . . .	95	61	156	78	60	138

## INK, MUCILAGE, AND PASTE — 1892, 1893 — Concluded.

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	44.11	41.44	-2.67	-6.05
Average number of days in operation, . .	302.60	291.65	-10.95	-3.62

IVORY, BONE, SHELL, AND HORN GOODS, ETC.  
1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . .	10	10	=	=
Number of private firms, . . . . .	10	10	=	=
Number of partners, . . . . .	18	18	=	=
Males, . . . . .	16	16	=	=
Females, . . . . .	1	1	=	=
Special, . . . . .	1	-	-1	-100.00
Estates, . . . . .	-	1	+1	-

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$212,183	\$205,600	-\$6,583	-3.10

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$229,988	\$199,222	-\$30,766	-13.38

IVORY, BONE, SHELL, AND HORN GOODS, ETC. — 1892, 1893  
— Continued.

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$473,410	\$428,510	—\$44,900	—9.48

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	434	392	—42	—9.68
Smallest number, . . . . .	381	282	—99	—25.98
Greatest number, . . . . .	501	493	—8	—1.60
Excess of greatest over smallest number, .	120	211	+91	+75.83

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	400	51	451	421	48	469
February, . . . . .	413	52	465	421	49	470
March, . . . . .	423	50	473	434	50	484
April, . . . . .	408	53	461	416	52	468
May, . . . . .	343	50	393	377	49	426
June, . . . . .	370	48	418	357	44	401
July, . . . . .	369	49	418	327	42	369
August, . . . . .	366	47	413	275	37	312
September, . . . . .	363	44	412	217	31	248
October, . . . . .	374	45	419	285	37	322
November, . . . . .	359	45	404	312	38	350
December, . . . . .	400	48	448	332	41	373
During the entire year,* . .	2	2	4	2	2	4

\* 1 establishment in 1892 and in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$176,304	\$157,314	—\$18,990	—10.77
Average yearly earnings, . . . . .	406.23	401.31	—4.92	—1.21

**IVORY, BONE, SHELL, AND HORN GOODS, ETC. — 1892, 1893**  
— Concluded.

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	28	9	37	22	9	31
\$5 but under \$6, . . . . .	36	27	63	24	16	40
\$6 but under \$7, . . . . .	44	13	57	34	23	57
\$7 but under \$8, . . . . .	57	2	59	58	5	63
\$8 but under \$9, . . . . .	26	1	27	50	-	50
\$9 but under \$10, . . . . .	57	1	58	68	1	69
\$10 but under \$12, . . . . .	117	1	118	108	1	109
\$12 but under \$15, . . . . .	62	-	62	55	-	55
\$15 but under \$20, . . . . .	19	-	19	19	-	19
\$20 and over, . . . . .	-	-	-	-	-	-
<b>TOTALS, . . . . .</b>	<b>446</b>	<b>54</b>	<b>500</b>	<b>438</b>	<b>55</b>	<b>493</b>

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	76.70	69.90	-6.80	-8.87
Average number of days in operation, . . .	289.06	277.86	-11.20	-3.87

**LEATHER. 1892, 1893.**

**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	148	148	=	=
Number of private firms, . . . . .	134	131	-3	-2.24
Number of partners, . . . . .	230	225	-5	-2.17
Males, . . . . .	225	219	-6	-2.67
Special, . . . . .	5	5	=	=
Estates, . . . . .	-	1	+1	-
Number of corporations, . . . . .	14	17	+3	+21.43
Number of stockholders, . . . . .	192	240	+48	+25.00
Males, . . . . .	160	193	+33	+20.63
Females, . . . . .	32	43	+11	+34.38
Banks, trustees, etc., . . . . .	-	4	+4	-
Aggregates: partners and stockholders, . .	422	465	+43	+10.19

LEATHER — 1892, 1893 — Continued.

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . .	\$8,011,549	\$7,963,904	—\$47,645	—0.59

STOCK USED. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . .	\$11,891,499	\$11,033,354	—\$858,145	—7.22
Bark, hemlock . . . . .	408,796	440,660	+31,864	+7.79
Grease, curriers' . . . . .	92,952	98,992	+6,040	+6.50
Hides (not specified), . . . . .	1,985,523	1,912,136	—73,387	—3.70
Leather:				
Belt, . . . . .	154,210	134,793	—19,417	—12.59
Rough, . . . . .	1,037,714	934,820	—102,894	—9.92
Split (rough), . . . . .	363,967	335,523	—28,444	—7.81
Leather (not specified), . . . . .	307,477	220,835	—86,642	—28.18
Skins:				
Calf, . . . . .	437,920	422,680	—15,240	—3.48
Goat, . . . . .	1,517,376	977,797	—539,579	—35.56
Goat (tanned), . . . . .	595,040	419,573	—175,467	—29.49
Sheep, . . . . .	1,558,770	1,560,586	+1,816	+0.12
Sheep (morocco), . . . . .	152,100	76,050	—76,050	—50.00
Sumac, . . . . .	47,613	42,157	—5,456	—11.46
Not classified in detail, . . . . .	3,232,041	3,456,752	+224,711	+6.95

STOCK USED. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Quantities	Percent- ages
Bark, hemlock . . . . .	cords	44,547	48,034	+3,487	+7.83
Grease, curriers' . . . . .	100 pounds	17,130	15,924	—1,206	—7.04
Grease, curriers' . . . . .	barrels	1,420	2,138	+718	+50.56
Hides (not specified), . . . . .	100 pounds	90,661	111,453	+20,792	+22.93
Hides (not specified), . . . . .	. . . . .	635,626	692,417	+56,791	+8.93
Leather:					
Belt, . . . . .	100 pounds	5,077	4,272	—805	—15.86
Rough, . . . . .	skins	574,036	583,204	+9,168	+1.60
Split (rough), . . . . .	100 pounds	38,465	35,956	—2,509	—6.52
Leather (not specified), . . . . .	100 pounds	11,554	9,192	—2,362	—20.44
Skins:					
Calf, . . . . .	dozen	45,787	42,332	—3,455	—7.55
Goat, . . . . .	dozen	250,886	142,879	—108,007	—43.05
Goat (tanned), . . . . .	dozen	80,067	58,571	—21,496	—26.85
Sheep, . . . . .	dozen	380,513½	365,285	—15,228½	—4.00
Sheep (morocco), . . . . .	dozen	46,800	23,400	—23,400	—50.00
Sumac, . . . . .	100 pounds	14,960	12,510	—2,450	—16.38



## LEATHER — 1892, 1893 — Continued.

## STOCK USED. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measurement	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percentages
Bark, hemlock . . . . .	cords	\$9.18	\$9.17	—\$0.01	—0.11
Grease, curriers' . . . . .	100 pounds	4.23	4.27	+0.04	+0.95
Grease, curriers' . . . . .	barrels	14.46	14.47	+0.01	+0.07
Hides (not specified), . . . . .	100 pounds	5.12	4.40	—0.72	—14.06
Hides (not specified), . . . . .	. . . . .	2.39	2.05	—0.34	—14.23
Leather:					
Belt, . . . . .	100 pounds	30.37	31.55	+1.18	+3.89
Rough, . . . . .	sides	1.81	1.60	—0.21	—11.60
Split (rough), . . . . .	100 pounds	9.46	9.33	—0.13	—1.37
Leather (not specified), . . . . .	100 pounds	26.61	24.02	—2.59	—9.73
Skins:					
Calf, . . . . .	dozen	9.56	9.98	+0.42	+4.39
Goat, . . . . .	dozen	6.05	6.84	+0.79	+13.06
Goat (tanned), . . . . .	dozen	7.43	7.16	—0.27	—3.63
Sheep, . . . . .	dozen	4.10	4.27	+0.17	+4.15
Sheep (morocco), . . . . .	dozen	3.25	3.25	*=	*=
Sumac, . . . . .	100 pounds	3.18	3.37	+0.19	+5.97

\* No change in average value.

## GOODS MADE. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percentages
Total value of goods made and work done, .	\$18,644,270	\$15,548,822	—\$3,095,448	—16.60
Belting, leather . . . . .	619,721	560,565	—59,156	—9.55
Leather:				
Belt, . . . . .	257,760	193,205	—64,555	—25.04
Buff, . . . . .	736,086	537,542	—198,544	—26.97
Calfskin, . . . . .	789,225	730,200	—59,025	—7.48
Dongola, . . . . .	296,730	184,645	—112,085	—37.77
Dongola (imitation), . . . . .	183,000	88,269	—44,731	—33.63
Glove, . . . . .	89,175	141,000	+51,825	+58.12
Glove-grain, . . . . .	274,000	248,988	—25,012	—9.13
Goatskin, . . . . .	1,375,668	789,188	—586,480	—42.63
Grain, . . . . .	1,236,299	1,118,150	—118,149	—9.56
Kangaroo, . . . . .	52,500	56,000	+3,500	+6.67
Kid, . . . . .	894,830	603,330	—291,500	—32.58
Kip, . . . . .	162,253	151,900	—10,353	—6.35
Sheepskin, . . . . .	1,092,120	839,585	—252,535	—23.12
Split, . . . . .	1,511,868	1,499,165	—12,703	—0.84
Leather (not specified), . . . . .	638,578	568,247	—70,331	—11.01
Leather-board, . . . . .	116,441	96,898	—19,543	—16.73
Not classified in detail, . . . . .	8,368,016	7,141,945	—1,226,071	—14.65

LEATHER — 1892, 1893 — Continued.

GOODS MADE. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Quantities	Percent- ages
Belting, leather . . . .	100 sq. feet	12,277	11,765	—512	—4.17
Leather :					
Belt, . . . . .	100 pounds	4,499	3,376	—1,123	—24.96
Buff, . . . . .	sides	384,664	296,561	—88,103	—22.90
Calfskin, . . . . .	dozen	44,517	41,017	—3,500	—7.86
Dongola, . . . . .	dozen	26,975	18,358	—8,617	—31.94
Dongola (imitation), . . .	100 feet	12,469	8,024	—4,445	—35.65
Glove, . . . . .	sides	61,500	94,000	+32,500	+52.85
Glove-grain, . . . . .	100 feet	31,099	27,892	—3,207	—10.31
Goatskin, . . . . .	dozen	147,925	82,007	—65,918	—44.56
Grain, . . . . .	100 feet	103,272	98,615	—4,657	—4.51
Grain, . . . . .	sides	188,648	197,806	+9,158	+4.85
Kangaroo, . . . . .	dozen	3,500	4,000	+500	+14.29
Kid, . . . . .	dozen	93,170	58,294	—34,876	—37.43
Kip, . . . . .	100 feet	16,425	18,042	+1,617	+9.84
Sheepskin, . . . . .	dozen	197,433	147,240½	—50,192½	—25.42
Split, . . . . .	100 pounds	97,311	105,071	+7,760	+7.97
Leather (not specified), . .	sides	321,724	309,665	—12,059	—3.75
Leather-board, . . . . .	tons	1,412	1,212½	—199½	—14.13

GOODS MADE. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measure- ment	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Belting, leather . . . . .	100 sq. feet	\$50.48	\$47.65	—\$2.83	—5.61
Leather :					
Belt, . . . . .	100 pounds	67.29	67.23	—0.06	—0.10
Buff, . . . . .	sides	1.91	1.81	—0.10	—5.24
Calfskin, . . . . .	dozen	17.73	17.80	+0.07	+0.39
Dongola, . . . . .	dozen	11.00	10.06	—0.94	—8.55
Dongola (imitation), . . .	100 feet	10.67	11.00	+0.33	+3.09
Glove, . . . . .	sides	1.45	1.50	+0.05	+3.45
Glove-grain, . . . . .	100 feet	8.81	8.93	+0.12	+1.36
Goatskin, . . . . .	dozen	9.30	9.62	+0.32	+3.44
Grain, . . . . .	100 feet	8.27	7.72	—0.55	—6.65
Grain, . . . . .	sides	2.02	1.81	—0.21	—10.40
Kangaroo, . . . . .	dozen	15.00	14.00	—1.00	—6.67
Kid, . . . . .	dozen	9.60	10.35	+0.75	+7.81
Kip, . . . . .	100 feet	9.88	8.42	—1.46	—14.78
Sheepskin, . . . . .	dozen	5.53	5.70	+0.17	+3.07
Split, . . . . .	100 pounds	15.54	14.27	—1.27	—8.17
Leather (not specified), . .	sides	1.98	1.84	—0.14	—7.07
Leather-board, . . . . .	tons	82.47	79.92	—2.55	—3.09

## LEATHER — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	5,918	5,602	-316	-5.34
Smallest number, . . . . .	4,838	3,783	-1,070	-22.06
Greatest number, . . . . .	7,038	7,320	+282	+4.01
Excess of greatest over smallest number, .	2,185	3,537	+1,352	+61.93

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	5,837	163	5,500	6,301	191	6,493
February, . . . . .	5,507	162	5,669	6,336	191	6,527
March, . . . . .	5,749	167	5,916	6,438	182	6,620
April, . . . . .	5,726	180	5,906	6,402	231	6,633
May, . . . . .	5,770	180	5,950	6,147	236	6,383
June, . . . . .	5,786	176	5,962	5,781	231	6,012
July, . . . . .	5,786	193	5,979	4,949	145	5,094
August, . . . . .	5,692	198	5,890	4,249	115	4,364
September, . . . . .	5,678	186	5,864	4,180	110	4,290
October, . . . . .	5,762	194	5,956	4,528	127	4,655
November, . . . . .	5,966	204	6,170	4,610	134	4,744
December, . . . . .	6,082	208	6,290	5,005	148	5,153
During the entire year,* . . . . .	474	1	475	117	1	118

\* 27 establishments in 1892; 7 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$3,003,501	\$2,748,051	-\$255,450	-8.51
Average yearly earnings, . . . . .	507.52	490.55	-16.97	-3.34

LEATHER — 1892, 1893 — Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	123	49	172	97	85	182
\$5 but under \$6, . . . .	141	53	194	128	66	194
\$6 but under \$7, . . . .	347	44	391	230	56	336
\$7 but under \$9, . . . .	517	30	547	594	27	621
\$8 but under \$9, . . . .	710	16	726	702	12	714
\$9 but under \$10, . . . .	1,417	14	1,431	1,533	9	1,547
\$10 but under \$12, . . . .	1,663	9	1,672	1,652	10	1,662
\$12 but under \$15, . . . .	1,164	2	1,166	1,199	2	1,201
\$15 but under \$20, . . . .	565	-	565	494	-	494
\$20 and over, . . . . .	158	-	158	140	-	140
TOTALS, . . . . .	6,805	217	7,022	6,324	267	7,091

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	70.21	60.53	-9.68	-13.97
Average number of days in operation, . . .	294.12	279.04	-15.08	-5.13

LIQUORS AND BEVERAGES (NOT SPIRITUOUS).

1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	23	23	=	=
Number of private firms, . . . . .	22	21	-1	-4.55
Number of partners, . . . . .	28	26	-2	-7.14
Males, . . . . .	26	24	-2	-7.69
Females, . . . . .	1	1	=	=
Special, . . . . .	1	1	=	=
Number of corporations, . . . . .	1	2	+1	+100.00
Number of stockholders, . . . . .	32	46	+14	+43.75
Males, . . . . .	24	40	+16	+66.67
Females, . . . . .	8	6	-8	-37.50
Banks, trustees, etc., . . . . .	-	1	+1	-
Aggregates : partners and stockholders, .	60	72	+12	+20.00

LIQUORS AND BEVERAGES (NOT SPIRITUOUS) — 1892, 1893  
— Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$338,205	\$413,432	+\$75,227	+22.24

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$397,236	\$426,336	+\$29,100	+7.33

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$791,568	\$742,636	-\$48,932	-6.15

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	265	247	-18	-6.79
Smallest number, . . . . .	207	181	-26	-12.56
Greatest number, . . . . .	362	373	+11	+3.04
Excess of greatest over smallest number, .	155	192	+37	+23.87

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	211	-	211	186	-	186
February, . . . . .	212	-	212	187	-	187
March, . . . . .	214	-	214	193	-	193
April, . . . . .	228	-	228	213	-	213
May, . . . . .	250	-	250	264	-	264
June, . . . . .	319	-	319	313	-	313
July, . . . . .	346	2	348	344	-	344

**LIQUORS AND BEVERAGES (NOT SPIRITUOUS) — 1892, 1893**  
— Concluded.

**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	343	2	345	334	-	334
September, . . . . .	293	-	293	295	-	295
October, . . . . .	270	-	270	229	-	229
November, . . . . .	252	-	252	206	-	206
December, . . . . .	224	-	224	189	-	189
During the entire year,* . .	15	-	15	10	-	10

\* 4 establishments in 1892; 3 establishments in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$146,056	\$134,872	-\$11,184	-7.66
Average yearly earnings, . . . . .	551.15	546.04	-5.11	-0.93

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	7	-	7	3	-	3
\$5 but under \$6, . . . . .	5	2	7	2	-	2
\$6 but under \$7, . . . . .	15	-	15	10	-	10
\$7 but under \$8, . . . . .	8	-	8	15	-	15
\$8 but under \$9, . . . . .	29	-	29	38	-	38
\$9 but under \$10, . . . . .	43	-	43	64	-	64
\$10 but under \$12, . . . . .	38	-	38	78	-	78
\$12 but under \$15, . . . . .	90	-	90	114	-	114
\$15 but under \$20, . . . . .	40	-	40	48	-	48
\$20 and over, . . . . .	22	-	22	26	-	26
TOTALS, . . . . .	297	2	299	398	-	398

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	58.35	52.83	-5.52	-9.46
Average number of days in operation, . . .	303.25	302.11	-1.14	-0.38

**LIQUORS: MALT, DISTILLED, AND FERMENTED.  
1892, 1893.**

**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	53	53	=	=
Number of private firms, . . . . .	44	40	-4	-9.09
Number of partners, . . . . .	83	72	-11	-13.25
Males, . . . . .	77	66	-11	-14.29
Females, . . . . .	6	6	=	=
Number of corporations, . . . . .	9	13	+4	+44.44
Number of stockholders, . . . . .	78	99	+21	+26.92
Males, . . . . .	65	77	+12	+18.46
Females, . . . . .	8	11	+3	+37.50
Banks, trustees, etc., . . . . .	1	7	+6	+600.00
Syndicates, . . . . .	4	4	=	=
Aggregates: partners and stockholders, .	161	171	+10	+6.21

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$7,307,634	\$7,823,013	+\$515,379	+7.05

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$3,519,545	\$3,512,099	-\$7,446	-0.21

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$8,630,909	\$8,878,318	+\$247,409	+2.87

LIQUORS: MALT, DISTILLED, AND FERMENTED — 1892, 1893  
— Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	1,206	1,248	+42	+3.48
Smallest number, . . . . .	1,066	1,099	+34	+3.19
Greatest number, . . . . .	1,411	1,461	+50	+3.54
Excess of greatest over smallest number, .	346	362	+16	+4.62

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	1,081	-	1,081	1,159	-	1,159
February, . . . . .	1,063	-	1,063	1,150	-	1,150
March, . . . . .	1,110	-	1,110	1,148	-	1,148
April, . . . . .	1,134	-	1,134	1,200	-	1,200
May, . . . . .	1,178	-	1,178	1,243	-	1,243
June, . . . . .	1,223	2	1,225	1,301	2	1,303
July, . . . . .	1,290	2	1,292	1,341	2	1,343
August, . . . . .	1,296	2	1,297	1,345	2	1,347
September, . . . . .	1,276	2	1,278	1,315	2	1,317
October, . . . . .	1,283	-	1,283	1,286	-	1,286
November, . . . . .	1,264	-	1,264	1,245	-	1,245
December, . . . . .	1,208	-	1,208	1,185	-	1,185
During the entire year,* . . .	240	-	240	196	-	196

\* 12 establishments in 1892 and in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$853,291	\$915,690	+\$57,399	+6.69
Average yearly earnings, . . . . .	711.68	733.73	+22.05	+3.10



LIQUORS: MALT, DISTILLED, AND FERMENTED — 1892, 1893

— Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	4	-	4	2	-	2
\$5 but under \$6, . . . .	6	-	6	3	-	3
\$6 but under \$7, . . . .	20	-	20	11	-	11
\$7 but under \$8, . . . .	19	-	19	9	-	9
\$8 but under \$9, . . . .	31	-	31	30	-	30
\$9 but under \$10, . . . .	139	2	141	140	2	142
\$10 but under \$12, . . . .	182	-	182	157	-	157
\$12 but under \$15, . . . .	586	-	586	566	-	566
\$15 but under \$20, . . . .	345	-	345	442	-	442
\$20 and over, . . . . .	63	-	63	86	-	86
TOTALS, . . . . .	1,395	2	1,397	1,446	2	1,448

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	60.85	56.38	-4.47	-7.33
Average number of days in operation, . .	301.83	301.27	-0.56	-0.19

LUMBER. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . .	21	21	=	=
Number of private firms, . . . . .	20	19	-1	-5.00
Number of partners, . . . . .	33	30	-3	-9.09
Males, . . . . .	32	29	-3	-9.38
Females, . . . . .	1	1	=	=
Number of corporations, . . . . .	1	2	+1	+100.00
Number of stockholders, . . . . .	37	39	+2	+5.41
Males, . . . . .	20	18	-2	-10.00
Females, . . . . .	14	15	+1	+7.14
Banks, trustees, etc., . . . . .	3	6	+3	+100.00
Aggregates: partners and stockholders, .	70	69	-1	-1.43

LUMBER — 1892, 1893 — Continued.

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$2,324,720	\$2,612,405	+\$287,685	+12.38

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$1,750,490	\$1,744,533	—\$5,957	—0.34

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$2,826,426	\$2,587,980	—\$238,446	—8.44

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	821	870	+49	+5.97
Smallest number, . . . . .	694	706	+12	+1.73
Greatest number, . . . . .	932	1,041	+109	+11.70
Excess of greatest over smallest number, .	238	335	+97	+40.76

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	787	11	798	769	8	777
February, . . . . .	756	11	767	785	7	792
March, . . . . .	775	9	784	875	8	883
April, . . . . .	791	10	801	924	10	934
May, . . . . .	833	11	844	971	9	980
June, . . . . .	813	11	824	894	10	904
July, . . . . .	814	11	825	817	10	827

## LUMBER — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	798	11	809	871	9	880
September, . . . . .	830	11	841	902	11	913
October, . . . . .	826	11	837	837	9	846
November, . . . . .	843	11	854	859	9	868
December, . . . . .	860	11	871	813	8	821
During the entire year,* . .	19	—	19	74	—	74

\* 3 establishments in 1892; 2 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$384,491	\$381,570	—\$2,921	—0.76
Average yearly earnings, . . . . .	468.32	438.59	—29.73	—6.35

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	18	—	18	45	9	54
\$5 but under \$6, . . . . .	7	—	7	39	—	39
\$6 but under \$7, . . . . .	12	10	22	32	—	32
\$7 but under \$8, . . . . .	53	—	53	63	1	64
\$8 but under \$9, . . . . .	105	—	105	41	—	41
\$9 but under \$10, . . . . .	213	1	214	156	—	156
\$10 but under \$12, . . . . .	158	—	158	147	—	147
\$12 but under \$15, . . . . .	221	—	221	105	—	105
\$15 but under \$20, . . . . .	91	—	91	90	—	90
\$20 and over, . . . . .	20	—	20	17	—	17
TOTALS, . . . . .	893	11	904	738	10	748

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . .	73.62	69.38	—4.24	—5.76
Average number of days in operation, . . . .	300.60	255.65	—44.95	—14.95

**MACHINES AND MACHINERY. 1892, 1893.****ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	335	335	=	=
Number of private firms, . . . . .	242	239	-3	-1.24
Number of partners, . . . . .	371	357	-14	-3.77
Males, . . . . .	356	338	-18	-5.06
Females, . . . . .	10	11	+1	+10.00
Special, . . . . .	2	1	-1	-50.00
Estates, . . . . .	3	7	+4	+133.33
Number of corporations, . . . . .	93	96	+3	+3.23
Number of stockholders, . . . . .	3,778	4,088	+310	+8.21
Males, . . . . .	2,612	2,744	+132	+5.05
Females, . . . . .	992	1,156	+164	+16.53
Banks, trustees, etc., . . . . .	173	187	+14	+8.09
Syndicates, . . . . .	1	1	=	=
Aggregates: partners and stockholders, .	4,149	4,445	+296	+7.13

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$30,811,473	\$32,917,618	+\$2,106,145	+6.84

**STOCK USED. AGGREGATE VALUES.**

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$11,465,690	\$10,124,464	-\$1,341,226	-11.70
Castings:				
Brass, . . . . .	58,942	51,404	-7,538	-12.79
Composition, . . . . .	24,331	20,440	-3,941	-16.16
Iron, . . . . .	335,378	295,844	-39,534	-11.79
Castings (not specified), . . . . .	67,617	66,612	-1,005	-1.49
Copper (not specified), . . . . .	80,691	79,531	-1,160	-1.44
Iron:				
Bar, . . . . .	69,120	76,818	+7,698	+11.14
Cast, . . . . .	482,497	407,648	-74,849	-15.51
Pig, . . . . .	462,666	407,446	-55,219	-11.93
Wrought, . . . . .	199,891	165,042	-34,849	-17.43
Iron (not specified), . . . . .	426,050	413,207	-12,843	-3.01

## MACHINES AND MACHINERY — 1892, 1893 — Continued.

## STOCK USED. AGGREGATE VALUES — Concluded.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Lumber, dressed . . . . .	\$239,909	\$225,960	—\$13,949	—5.81
Steel, plate . . . . .	55,166	50,598	—4,568	—8.28
Steel (not specified), . . . . .	252,685	276,528	+13,843	+5.27
Not classified in detail, . . . . .	8,700,698	7,587,386	—1,113,312	—12.80

## STOCK USED. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Quantities	Percent- ages
Castings :					
Brass, . . . . .	100 pounds	3,079	2,576	—503	—16.34
Composition, . . . . .	100 pounds	1,179	1,043	—136	—11.54
Iron, . . . . .	tons	6,510½	5,902	—608½	—9.35
Castings (not specified), . . . . .	100 pounds	24,862	25,074	+212	+0.55
Copper (not specified), . . . . .	100 pounds	6,864	7,275	+411	+5.99
Iron :					
Bar, . . . . .	tons	1,511½	1,947	+435½	+28.79
Cast, . . . . .	tons	8,318½	7,290½	—1,027½	—12.35
Pig, . . . . .	tons	26,471½	25,959½	—512	—1.93
Wrought, . . . . .	tons	2,852½	2,441	—411½	—14.43
Iron (not specified), . . . . .	tons	12,358½	13,204	+845½	+6.84
Lumber, dressed . . . . .	M feet	8,308	8,160	—148	—1.73
Steel, plate . . . . .	100 pounds	26,989	23,805	—3,184	—11.80
Steel (not specified), . . . . .	100 pounds	73,276	84,111	+10,835	+14.79

## STOCK USED. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measure- ment	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Castings:					
Brass, . . . . .	100 pounds	\$19.14	\$19.95	+\$0.81	+4.23
Composition, . . . . .	100 pounds	20.68	19.60	-1.08	-5.22
Iron, . . . . .	tons	51.51	50.13	-1.38	-2.68
Castings (not specified), . . . . .	100 pounds	2.72	2.66	-0.06	-2.21
Copper (not specified), . . . . .	100 pounds	11.76	10.93	-0.83	-7.06
Iron:					
Bar, . . . . .	tons	45.72	39.45	-6.27	-13.71
Cast, . . . . .	tons	58.00	55.91	-2.09	-3.60
Pig, . . . . .	tons	17.48	15.70	-1.78	-10.18
Wrought, . . . . .	tons	70.08	67.61	-2.47	-3.52
Iron (not specified), . . . . .	tons	34.47	31.29	-3.18	-9.23
Lumber, dressed . . . . .	M feet	23.88	27.69	-1.19	-4.12
Steel, plate . . . . .	100 pounds	2.04	2.13	+0.09	+4.41
Steel (not specified), . . . . .	100 pounds	3.58	3.29	-0.29	-8.10

MACHINES AND MACHINERY — 1892, 1893 — Continued.

GOODS MADE. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$29,960,988	\$27,975,359	—\$1,985,629	—6.63
Bobbins, . . . . .	88,600	92,000	+3,400	+3.84
Boilers, steam . . . . .	269,994	288,479	+18,485	+6.85
Engines (not specified), . . . . .	134,495	139,804	+5,309	+3.95
Harnesses, loom . . . . .	100,776	110,160	+9,384	+9.31
Lathes (not specified), . . . . .	261,157	192,095	—68,462	—26.21
Machinery :				
Boot and shoe, . . . . .	160,866	116,601	—44,265	—27.52
Leather, . . . . .	138,351	126,118	—12,233	—8.84
Metal-working, . . . . .	836,621	272,431	—64,190	—19.07
Paper, . . . . .	858,314	225,443	—132,871	—37.08
Printing, . . . . .	197,617	163,722	—33,895	—17.15
Textile, . . . . .	906,007	938,961	+32,954	+3.64
Woodworking, . . . . .	221,403	169,770	—21,633	—9.77
Pulleys, . . . . .	21,827	24,222	+2,395	+10.97
Pumps, steam . . . . .	84,590	89,601	+5,011	+14.49
Spindles, . . . . .	59,450	49,200	—10,250	—17.24
Tanks, iron . . . . .	50,139	45,721	—4,418	—8.81
Valves, steam . . . . .	99,663	99,963	+310	+0.31
Valves (not specified), . . . . .	117,844	97,101	—20,743	—17.60
Not classified in detail, . . . . .	26,403,284	24,753,367	—1,649,917	—6.25

GOODS MADE. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Quantities	Percent- ages
Bobbins, . . . . .	thousand	8,845	9,350	+505	+5.71
Boilers, steam . . . . .	. . . . .	656	674	+18	+2.74
Engines (not specified), . . . . .	. . . . .	132	143	+11	+8.33
Harnesses, loom . . . . .	100 beers	44,826	49,122	+4,296	+9.58
Lathes (not specified), . . . . .	. . . . .	1,038	806	—233	—22.45
Pulleys, . . . . .	. . . . .	4,119	4,220	+101	+2.45
Pumps, steam . . . . .	. . . . .	298	252	—36	—12.50
Spindles, . . . . .	hundred	5,435	4,440	—995	—18.31
Tanks, iron . . . . .	. . . . .	433	336	—97	—22.40
Valves, steam . . . . .	. . . . .	3,969	3,417	—552	—13.91
Valves (not specified), . . . . .	. . . . .	120,091	119,949	—142	—0.12

## MACHINES AND MACHINERY — 1892, 1893 — Continued.

## STOCK USED. AGGREGATE VALUES — Concluded.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Lumber, dressed . . . . .	\$239,909	\$225,960	—\$13,949	—5.91
Steel, plate . . . . .	55,166	50,598	—4,568	—8.28
Steel (not specified), . . . . .	262,685	276,528	+13,843	+5.27
Not classified in detail, . . . . .	8,700,608	7,587,386	—1,113,212	—12.80

## STOCK USED. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Quantities	Percent- ages
Castings:					
Brass, . . . . .	100 pounds	3,079	2,576	—503	—16.34
Composition, . . . . .	100 pounds	1,179	1,043	—136	—11.54
Iron, . . . . .	tons	6,510½	5,902	—608½	—9.35
Castings (not specified), . . . . .	100 pounds	24,862	25,074	+212	+0.55
Copper (not specified), . . . . .	100 pounds	6,864	7,275	+411	+5.99
Iron:					
Bar, . . . . .	tons	1,511½	1,947	+435½	+28.79
Cast, . . . . .	tons	8,318½	7,290½	—1,027½	—12.35
Pig, . . . . .	tons	26,471½	25,959½	—512	—1.93
Wrought, . . . . .	tons	2,852½	2,441	—411½	—14.43
Iron (not specified), . . . . .	tons	12,358½	13,204	+845½	+6.84
Lumber, dressed . . . . .	M feet	8,308	8,160	—148	—1.75
Steel, plate . . . . .	100 pounds	26,989	23,805	—3,184	—11.80
Steel (not specified), . . . . .	100 pounds	73,276	84,111	+10,835	+14.79

## STOCK USED. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measure- ment	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Castings:					
Brass, . . . . .	100 pounds	\$19.14	\$19.95	+\$0.81	+4.23
Composition, . . . . .	100 pounds	20.63	19.60	—1.03	—5.22
Iron, . . . . .	tons	51.51	50.13	—1.38	—2.68
Castings (not specified), . . . . .	100 pounds	2.72	2.66	—0.06	—2.21
Copper (not specified), . . . . .	100 pounds	11.76	10.93	—0.83	—7.06
Iron:					
Bar, . . . . .	tons	45.72	39.45	—6.27	—13.71
Cast, . . . . .	tons	58.00	55.91	—2.09	—3.60
Pig, . . . . .	tons	17.48	15.70	—1.78	—10.18
Wrought, . . . . .	tons	70.08	67.61	—2.47	—3.52
Iron (not specified), . . . . .	tons	34.47	31.29	—3.18	—9.23
Lumber, dressed . . . . .	M feet	23.88	27.69	+3.81	+16.00
Steel, plate . . . . .	100 pounds	2.04	2.13	+0.09	+4.41
Steel (not specified), . . . . .	100 pounds	3.58	3.29	—0.29	—8.10

## MACHINES AND MACHINERY — 1892, 1893 — Continued.

## GOODS MADE. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$29,960,988	\$27,975,359	-\$1,985,629	-6.63
Bobbins, . . . . .	88,000	92,000	+3,400	+3.84
Boilers, steam . . . . .	269,994	288,479	+18,485	+6.85
Engines (not specified), . . . . .	134,495	139,804	+5,309	+3.95
Harnesses, loom . . . . .	100,776	110,160	+9,384	+9.31
Lathes (not specified), . . . . .	261,157	192,695	-68,462	-26.21
Machinery :				
Boot and shoe, . . . . .	160,866	116,601	-44,265	-27.52
Leather, . . . . .	138,851	126,118	-12,233	-8.84
Metal-working, . . . . .	836,621	272,431	-64,190	-19.07
Paper, . . . . .	858,314	225,443	-132,871	-37.08
Printing, . . . . .	197,617	163,722	-33,895	-17.15
Textile, . . . . .	906,007	938,961	+32,954	+3.64
Woodworking, . . . . .	221,403	169,770	-21,633	-9.77
Pulleys, . . . . .	21,827	24,222	+2,395	+10.97
Pumps, steam . . . . .	84,590	89,601	+5,011	+14.49
Spindles, . . . . .	59,450	49,200	-10,250	-17.24
Tanks, iron . . . . .	50,189	45,721	-4,418	-8.81
Valves, steam . . . . .	99,663	99,963	+310	+0.31
Valves (not specified), . . . . .	117,844	97,101	-20,743	-17.60
Not classified in detail, . . . . .	26,403,284	24,753,367	-1,649,917	-6.25

## GOODS MADE. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Quantities	Percent- ages
Bobbins, . . . . .	thousand	8,845	9,350	+505	+5.71
Boilers, steam . . . . .	. . . . .	656	674	+18	+2.74
Engines (not specified), . . . . .	. . . . .	132	143	+11	+8.33
Harnesses, loom . . . . .	100 beers	44,826	49,122	+4,296	+9.58
Lathes (not specified), . . . . .	. . . . .	1,038	805	-233	-22.45
Pulleys, . . . . .	. . . . .	4,119	4,220	+101	+2.45
Pumps, steam . . . . .	. . . . .	298	252	-36	-12.50
Spindles, . . . . .	hundred	5,435	4,440	-995	-18.31
Tanks, iron . . . . .	. . . . .	433	836	-97	-22.40
Valves, steam . . . . .	. . . . .	3,969	3,417	-552	-13.91
Valves (not specified), . . . . .	. . . . .	120,091	119,949	-142	-0.12



## MACHINES AND MACHINERY—1892, 1893—Continued.

## GOODS MADE. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measurement	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Amounts	Percentages
Bobbins, . . . . .	thousand	\$10.02	\$9.84	—\$0.18	—1.80
Boilers, steam . . . . .	. . . . .	411.58	428.01	+16.43	+3.99
Engines (not specified), . . . . .	. . . . .	1,018.90	977.65	—41.25	—4.05
Harnesses, loom . . . . .	100 beers	2.25	2.24	—0.01	—0.44
Lathes (not specified), . . . . .	. . . . .	251.00	239.37	—12.23	—4.86
Pulleys, . . . . .	. . . . .	5.30	5.74	+0.44	+8.30
Pumps, steam . . . . .	. . . . .	120.10	157.15	+37.05	+30.85
Spindles, . . . . .	hundred	10.94	11.08	+0.14	+1.28
Tanks, iron . . . . .	. . . . .	115.79	136.07	+20.28	+17.51
Valves, steam . . . . .	. . . . .	25.11	29.25	+4.14	+16.49
Valves (not specified), . . . . .	. . . . .	0.98	0.81	+0.17	+17.35

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percentages
Average number, . . . . .	17,979	17,495	—484	—2.69
Smallest number, . . . . .	15,597	12,621	—2,976	—19.03
Greatest number, . . . . .	20,495	21,216	+721	+3.52
Excess of greatest over smallest number, . . . . .	4,898	8,595	+3,697	+75.48

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	17,155	254	17,409	18,956	266	19,222
February, . . . . .	17,124	257	17,381	19,066	271	19,337
March, . . . . .	17,028	253	17,276	19,352	263	19,615
April, . . . . .	17,349	264	17,613	18,856	282	19,137
May, . . . . .	17,246	254	17,500	18,850	279	19,129
June, . . . . .	17,324	260	17,584	18,307	287	18,594
July, . . . . .	17,606	259	17,865	17,798	238	18,036

## MACHINES AND MACHINERY — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	17,977	245	18,222	16,853	220	16,573
September, . . . . .	18,076	260	18,336	15,224	218	15,442
October, . . . . .	18,335	255	18,590	14,882	238	15,120
November, . . . . .	18,606	261	18,867	14,490	229	14,719
December, . . . . .	18,692	261	18,953	14,305	254	14,559
During the entire year,* . .	1,080	51	1,131	506	8	509

\* 73 establishments in 1892; 35 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$10,107,731	\$9,470,094	—\$637,637	—6.31
Average yearly earnings, . . . . .	562.20	541.30	—20.90	—3.72

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	1,278	69	1,347	1,196	61	1,257
\$5 but under \$6, . . . . .	696	41	737	892	40	932
\$6 but under \$7, . . . . .	1,116	84	1,200	1,093	100	1,193
\$7 but under \$8, . . . . .	1,481	53	1,534	1,548	37	1,585
\$8 but under \$9, . . . . .	1,446	20	1,466	1,617	16	1,633
\$9 but under \$10, . . . . .	2,227	9	2,236	2,292	11	2,303
\$10 but under \$12, . . . . .	2,976	9	2,985	3,039	13	3,052
\$12 but under \$15, . . . . .	4,097	8	4,105	4,226	12	4,238
\$15 but under \$20, . . . . .	8,564	1	8,565	8,750	2	8,752
\$20 and over, . . . . .	875	—	875	836	—	836
TOTALS, . . . . .	19,756	294	20,050	20,489	292	20,781

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	68.47	59.20	—9.27	—13.54
Average number of days in operation, . . .	303.51	286.60	—16.91	—5.57

**METALS AND METALLIC GOODS. 1892, 1893.**  
**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	341	341	=	=
Number of private firms, . . . . .	254	250	-4	-1.57
Number of partners, . . . . .	388	377	-11	-2.84
Males, . . . . .	374	361	-13	-3.43
Females, . . . . .	11	6	-5	-45.45
Special, . . . . .	1	4	+3	+300.00
Estates, . . . . .	2	6	+4	+200.00
Number of corporations, . . . . .	87	91	+4	+4.60
Number of stockholders, . . . . .	2,015	1,974	-41	-2.03
Males, . . . . .	1,408	1,303	-105	-7.46
Females, . . . . .	545	549	+4	+0.73
Banks, trustees, etc., . . . . .	62	120	+58	+93.33
Syndicates, . . . . .	-	2	+2	-
Aggregates: partners and stockholders, .	2,403	2,351	-52	-2.16

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$20,780,435	\$20,390,350	-\$390,085	-1.83

**STOCK USED. AGGREGATE VALUES.**

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$12,723,710	\$10,863,682	-\$1,860,028	-14.62
Antimony, . . . . .	15,287	7,884	-7,403	-48.43
Brass, sheet . . . . .	76,769	53,580	-23,189	-30.21
Brass (not specified), . . . . .	36,612	36,311	-301	-0.82
Composition, . . . . .	32,690	33,893	+1,203	+3.63
Copper, ingot . . . . .	259,305	329,963	+70,658	+27.25
Copper, sheet . . . . .	25,163	13,444	-11,719	-46.57
Copper (not specified), . . . . .	432,575	285,160	-147,415	-34.08
Gold, . . . . .	54,576	48,987	-5,589	-10.24
Iron:				
Bar, . . . . .	24,426	26,600	+2,234	+9.15
Pig, . . . . .	703,012	513,512	-189,500	-26.96
Scrap, . . . . .	384,479	272,432	-112,047	-29.14
Sheet, . . . . .	32,490	46,307	+13,817	+42.63
Wrought, . . . . .	120,764	142,699	+21,935	+18.16
Iron (not specified), . . . . .	706,297	523,165	-183,132	-25.93

## METALS AND METALLIC GOODS—1892, 1893—Continued.

## STOCK USED. AGGREGATE VALUES—Concluded.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Ore, iron . . . . .	\$11,163	\$9,964	—\$1,199	—10.74
Rails, iron (old), . . . . .	71,968	25,100	—46,868	—65.12
Rivet-rods, iron . . . . .	107,790	109,189	+1,399	+1.30
Silver, . . . . .	342,829	332,807	—10,022	—2.92
Spelter, . . . . .	95,260	92,033	—3,227	—3.39
Steel (not specified), . . . . .	306,235	249,835	—56,400	—18.42
Tin, pig . . . . .	43,401	26,818	—16,583	—38.21
Tin-plate, . . . . .	267,109	224,623	—42,484	—15.91
Wire, copper . . . . .	243,759	157,088	—86,671	—35.56
Wire, iron . . . . .	246,220	249,431	+3,211	+1.30
Zinc, . . . . .	54,126	39,789	—14,337	—26.49
Not classified in detail, . . . . .	8,029,405	7,018,006	—1,016,399	—12.66

## STOCK USED. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Quantities	Percent- ages
Antimony, . . . . .	100 pounds	1,111	614	—497	—44.73
Brass, sheet . . . . .	100 pounds	5,064	3,579	—1,485	—29.32
Brass (not specified), . . . . .	100 pounds	3,144	3,733	+589	+18.73
Composition, . . . . .	100 pounds	2,954	2,625	—329	—11.14
Copper, ingot . . . . .	100 pounds	21,524	26,581	+5,057	+23.49
Copper, sheet . . . . .	100 pounds	1,603	922	—681	—42.48
Copper (not specified), . . . . .	100 pounds	36,579	26,344	—10,235	—27.98
Gold, . . . . .	pwt.	52,807	48,148	—4,659	—8.82
Iron:					
Bar, . . . . .	tons	545½	673½	+128½	+23.52
Pig, . . . . .	tons	40,468½	33,224	—7,244½	—17.90
Scrap, . . . . .	tons	26,025	24,238½	—1,786½	—6.86
Sheet, . . . . .	tons	502	835½	+333½	+66.43
Wrought, . . . . .	tons	3,094	4,168	+1,074	+34.71
Iron (not specified), . . . . .	tons	43,362	32,918	—10,444	—24.09
Ore, iron . . . . .	tons	2,028	1,911	—117	—5.77
Rails, iron (old), . . . . .	tons	3,103	1,550	—1,553	—50.05
Rivet-rods, iron . . . . .	tons	1,866½	1,976½	+109½	+5.88
Silver, . . . . .	ounces	350,723	394,883	+44,160	+12.59
Spelter, . . . . .	100 pounds	19,677	21,477	+1,800	+9.15
Steel (not specified), . . . . .	tons	3,882½	3,362½	—520	—13.36
Tin, pig . . . . .	100 pounds	2,050	1,291	—759	—37.02
Tin-plate, . . . . .	boxes	42,582	37,680	—4,902	—11.51
Wire, copper . . . . .	100 pounds	16,258	10,416	—5,842	—35.93
Wire, iron . . . . .	100 pounds	57,893	64,473	+6,580	+11.37
Zinc, . . . . .	100 pounds	9,127	8,244	—883	—9.67

## METALS AND METALLIC GOODS — 1892, 1893 — Continued.

## STOCK USED. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measurement	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percentages
Antimony, . . . . .	100 pounds	\$13.76	\$12.84	—\$0.92	—6.69
Brass, sheet . . . . .	100 pounds	15.16	14.97	—0.19	—1.25
Brass (not specified), . . . . .	100 pounds	11.65	9.73	—1.92	—16.48
Composition, . . . . .	100 pounds	11.07	12.91	+1.84	+16.62
Copper, ingot . . . . .	100 pounds	12.05	12.41	+0.36	+2.99
Copper, sheet . . . . .	100 pounds	15.70	14.58	—1.12	—7.13
Copper (not specified), . . . . .	100 pounds	11.83	10.82	—1.01	—8.54
Gold, . . . . .	pwt.	1.03	1.02	—0.01	—0.97
Iron:					
Bar, . . . . .	tons	44.80	39.58	—5.22	—11.65
Pig, . . . . .	tons	17.37	15.46	—1.91	—11.00
Scrap, . . . . .	tons	14.77	11.24	—3.53	—23.90
Sheet, . . . . .	tons	64.72	55.42	—9.30	—14.37
Wrought, . . . . .	tons	89.03	84.24	—4.79	—12.37
Iron (not specified), . . . . .	tons	16.29	15.89	—0.40	—2.46
Ore, iron . . . . .	tons	5.50	5.21	—0.29	—5.27
Rails, iron (old), . . . . .	tons	23.19	16.19	—7.00	—30.19
Rivet-rods, iron . . . . .	tons	57.75	55.25	—2.50	—4.33
Silver, . . . . .	ounces	0.98	0.84	—0.14	—14.29
Spelter, . . . . .	100 pounds	4.84	4.29	—0.55	—11.36
Steel (not specified), . . . . .	tons	78.87	74.29	—4.58	—5.81
Tin, pig . . . . .	100 pounds	21.17	20.77	—0.40	—1.89
Tin-plate, . . . . .	boxes	6.27	5.96	—0.31	—4.94
Wire, copper . . . . .	100 pounds	14.99	15.08	+0.09	+0.60
Wire, iron . . . . .	100 pounds	4.25	3.87	—0.38	—8.94
Zinc, . . . . .	100 pounds	5.93	4.83	—1.10	—18.55

## GOODS MADE. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percentages
Total value of goods made and work done, .	\$26,259,252	\$22,878,245	—\$3,381,007	—12.63
Bridge-work, iron . . . . .	168,000	210,000	+42,000	+25.00
Castings:				
Brass, . . . . .	117,481	84,568	—32,913	—28.02
Composition, . . . . .	42,586	43,687	+1,101	+2.59
Iron, . . . . .	1,865,439	1,231,357	—134,082	—9.32
Castings (not specified), . . . . .	623,250	533,089	—89,161	—13.66
Cutlery, table . . . . .	772,484	649,384	—23,100	—2.99
Forgings, iron . . . . .	95,757	91,467	—4,290	—4.48
Gold leaf, . . . . .	108,235	103,129	—5,106	—4.72
Iron, bar . . . . .	806,364	219,464	—86,900	—28.36
Iron-work, architectural . . . . .	850,076	859,348	+9,272	+2.63
Nails, cut . . . . .	294,012	231,748	—62,264	—21.18
Needles, machine . . . . .	183,659	154,357	—29,302	—15.95
Sash weights, . . . . .	61,540	51,150	—10,390	—16.88

## METALS AND METALLIC GOODS — 1892, 1893 — Continued.

## GOODS MADE. AGGREGATE VALUES — Concluded.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Tacks, shoe . . . . .	\$19,241	\$14,106	—\$5,135	—26.69
Tacks (not specified), . . . . .	274,939	218,424	—56,515	—20.56
Tack-plate, . . . . .	227,809	144,830	—82,979	—36.42
Type, . . . . .	278,800	172,719	—106,081	—38.05
Not classified in detail, . . . . .	20,969,580	18,360,418	—2,609,162	—12.44

## GOODS MADE. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Quantities	Percent- ages
Bridge work, iron . . . . .	tons	2,100	3,000	+900	+42.86
Castings :					
Brass, . . . . .	100 pounds	5,464	3,980	—1,484	—27.16
Composition, . . . . .	100 pounds	2,600	2,568	—32	—1.23
Iron, . . . . .	tons	25,365½	23,662	—1,703½	—6.72
Castings (not specified), . . . . .	tons	10,115½	9,751½	—364½	—3.60
Cutlery, table . . . . .	dozen	681,434	592,481	—88,953	—13.05
Forgings, iron . . . . .	100 pounds	26,362	26,963	+601	+2.28
Gold leaf, . . . . .	packs	13,750	13,421	—329	—2.39
Iron, bar . . . . .	tons	8,136	6,938	—1,198	—14.72
Iron-work, architectural . . . . .	100 pounds	181,616	129,415	—2,201	—1.67
Nails, cut . . . . .	kegs	151,421	127,239	—24,182	—15.97
Needles, machine . . . . .	thousand	23,186	19,719	—3,467	—14.95
Sash weights, . . . . .	tons	2,952	2,510	—442	—14.97
Tacks, shoe . . . . .	100 pounds	1,877	1,406	—471	—25.09
Tacks (not specified), . . . . .	100 pounds	43,140	38,029	—5,111	—11.85
Tack-plate, . . . . .	tons	6,672	4,496	—2,176	—32.61
Type, . . . . .	100 pounds	6,562	4,185	—2,377	—36.22

## GOODS MADE. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measure- ment	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Bridge-work, iron . . . . .	tons	\$80.00	\$70.00	—\$10.00	—12.50
Castings :					
Brass, . . . . .	100 pounds	21.50	21.25	—0.25	—1.16
Composition, . . . . .	100 pounds	16.38	17.01	+0.63	+3.85
Iron, . . . . .	tons	53.83	52.04	—1.79	—3.33
Castings (not specified), . . . . .	tons	61.61	55.18	—6.43	—10.44
Cutlery, table . . . . .	dozen	1.13	1.10	—0.03	—2.65
Forgings, iron . . . . .	100 pounds	3.63	3.89	—0.24	—6.61
Gold leaf, . . . . .	packs	7.87	7.68	—0.19	—2.41
Iron, bar . . . . .	tons	37.66	31.63	—6.03	—16.01
Iron-work, architectural . . . . .	100 pounds	2.66	2.78	+0.12	+4.51

## METALS AND METALLIC GOODS—1892, 1893—Continued.

## GOODS MADE. AVERAGE VALUES—Concluded.

CLASSIFICATION.	Basis of Measurement	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Amounts	Percentages
Nails, cut . . . . .	kegs	\$1.94	\$1.82	—\$0.12	—6.19
Needles, machine . . . . .	thousand	7.92	7.83	—0.09	—1.14
Sash weights, . . . . .	tons	20.85	20.38	—0.47	—2.25
Tacks, shoe . . . . .	100 pounds	10.25	10.08	—0.22	—2.15
Tacks (not specified), . . . . .	100 pounds	6.87	5.74	—0.63	—9.89
Tack-plate, . . . . .	tons	34.14	32.21	—1.93	—5.65
Type, . . . . .	100 pounds	42.49	41.27	—1.22	—2.87

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percentages
Average number, . . . . .	14,856	13,313	—1,043	—7.27
Smallest number, . . . . .	12,365	10,336	—2,029	—16.41
Greatest number, . . . . .	16,058	15,611	—447	—2.73
Excess of greatest over smallest number, . . . . .	3,693	5,275	+1,582	+42.94

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	12,470	1,423	13,893	12,707	1,376	14,083
February, . . . . .	12,495	1,461	13,956	12,708	1,390	14,098
March, . . . . .	12,513	1,516	14,029	12,800	1,467	14,267
April, . . . . .	12,591	1,532	14,123	12,910	1,500	14,410
May, . . . . .	12,762	1,541	14,303	12,937	1,461	14,398
June, . . . . .	12,788	1,491	14,279	12,787	1,363	14,150
July, . . . . .	12,550	1,458	14,008	11,758	1,137	12,895
August, . . . . .	12,739	1,493	14,232	11,331	1,105	12,436
September, . . . . .	13,263	1,519	14,782	10,909	1,065	11,974
October, . . . . .	13,519	1,485	15,004	11,263	1,149	12,412
November, . . . . .	13,394	1,506	14,900	11,130	1,155	12,285
December, . . . . .	13,468	1,502	14,970	10,923	1,118	12,041
During the entire year,* . . . . .	1,751	325	2,076	1,420	230	1,650

\* 88 establishments in 1892; 63 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percentages
Total amount paid in wages, . . . . .	\$7,424,150	\$6,726,827	—\$697,323	—9.39
Average yearly earnings, . . . . .	517.15	505.28	—11.87	—2.30

METALS AND METALLIC GOODS — 1892, 1893 — Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	691	408	1,099	750	325	1,075
\$5 but under \$6, . . . . .	583	326	859	449	287	736
\$6 but under \$7, . . . . .	835	407	1,242	785	366	1,151
\$7 but under \$8, . . . . .	1,104	246	1,350	1,096	250	1,346
\$8 but under \$9, . . . . .	995	132	1,127	1,029	132	1,161
\$9 but under \$10, . . . . .	2,018	60	2,078	1,907	70	1,977
\$10 but under \$12, . . . . .	2,268	48	2,316	2,297	52	2,349
\$12 but under \$15, . . . . .	2,872	12	2,884	2,608	17	2,620
\$15 but under \$20, . . . . .	2,158	8	2,161	2,129	4	2,133
\$20 and over, . . . . .	698	-	698	808	-	808
TOTALS, . . . . .	14,172	1,642	15,814	13,848	1,503	15,351

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	69.32	59.37	-9.95	-14.35
Average number of days in operation, . . . . .	292.02	266.52	-25.50	-8.73

MIXED TEXTILES. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . . . .	13	13	=	=
Number of private firms, . . . . .	7	4	-3	-42.86
Number of partners, . . . . .	8	4	-4	-50.00
Males, . . . . .	8	4	-4	-50.00
Number of corporations, . . . . .	6	9	+3	+50.00
Number of stockholders, . . . . .	48	62	+14	+29.17
Males, . . . . .	43	52	+9	+20.93
Females, . . . . .	5	9	+4	+80.00
Syndicates, . . . . .	-	1	+1	-
Aggregates: partners and stockholders, . . . . .	56	66	+10	+17.86



## MIXED TEXTILES — 1892, 1893 — Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$1,047,542	\$962,388	—\$85,154	—8.13

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$1,186,107	\$1,102,216	—\$83,891	—7.07

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,838,645	\$1,638,269	—\$200,376	—10.90

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	772	760	—12	—1.55
Smallest number, . . . . .	708	551	—157	—22.16
Greatest number, . . . . .	820	868	+48	+5.65
Excess of greatest over smallest number, .	112	317	+205	+183.04

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	546	210	756	573	226	799
February, . . . . .	548	215	763	573	221	794
March, . . . . .	554	215	769	594	229	823
April, . . . . .	553	218	771	616	237	853
May, . . . . .	551	227	778	606	243	849
June, . . . . .	549	228	777	596	236	832
July, . . . . .	546	218	764	584	224	808

MIXED TEXTILES — 1892, 1893 — Concluded.  
PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	545	239	784	513	214	727
September, . . . . .	544	238	782	470	162	632
October, . . . . .	506	228	734	464	159	623
November, . . . . .	516	227	743	504	181	685
December, . . . . .	519	230	749	505	186	691
During the entire year,* . .	129	10	139	119	12	131

\* 3 establishments in 1892; 2 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$283,421	\$282,293	—\$1,128	—0.40
Average yearly earnings, . . . . .	367.12	371.44	+4.31	+1.17

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	59	133	192	67	113	180
\$5 but under \$6, . . . . .	27	50	77	25	56	81
\$6 but under \$7, . . . . .	70	39	109	78	46	124
\$7 but under \$8, . . . . .	167	16	183	167	19	186
\$8 but under \$9, . . . . .	45	5	50	56	9	65
\$9 but under \$10, . . . . .	93	3	96	74	5	79
\$10 but under \$12, . . . . .	57	4	61	51	8	59
\$12 but under \$15, . . . . .	35	—	35	34	—	34
\$15 but under \$20, . . . . .	26	—	26	31	—	31
\$20 and over, . . . . .	11	—	11	12	—	12
TOTALS, . . . . .	590	250	840	595	256	851

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	81.46	74.00	—7.46	—9.16
Average number of days in operation, . . .	298.85	285.56	—13.29	—4.45

**MODELS, LASTS, AND PATTERNS. 1892, 1893.**  
**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	46	46	=	=
Number of private firms, . . . . .	46	45	-1	-2.17
Number of partners, . . . . .	72	68	-4	-5.56
Males, . . . . .	70	67	-3	-4.29
Females, . . . . .	1	1	=	=
Special, . . . . .	1	-	-1	-100.00
Number of corporations, . . . . .	-	1	+1	-
Number of stockholders, . . . . .	-	20	+20	-
Males, . . . . .	-	20	+20	-
Aggregates: partners and stockholders, .	72	88	+16	+22.22

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$466,736	\$524,688	+\$57,952	+12.42

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$267,098	\$239,909	-\$27,189	-10.19

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$886,209	\$795,684	-\$90,525	-10.21

MODELS, LASTS, AND PATTERNS — 1892, 1893 — Continued.

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	420	417	—3	—0.71
Smallest number, . . . . .	366	341	—25	—6.83
Greatest number, . . . . .	467	488	+21	+4.50
Excess of greatest over smallest number, .	101	147	+46	+45.54

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	390	—	390	434	1	435
February, . . . . .	399	—	399	454	1	455
March, . . . . .	406	—	406	455	1	456
April, . . . . .	408	—	408	458	1	459
May, . . . . .	410	—	410	445	1	446
June, . . . . .	409	—	409	418	—	418
July, . . . . .	402	—	402	402	—	402
August, . . . . .	411	—	411	373	—	373
September, . . . . .	433	—	433	366	—	366
October, . . . . .	445	—	445	370	—	370
November, . . . . .	457	—	457	374	—	374
December, . . . . .	450	—	450	386	—	386
During the entire year,* . . .	134	—	134	55	—	55

\* 15 establishments in 1892; 5 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$297,485	\$283,519	—\$13,966	—4.69
Average yearly earnings, . . . . .	708.30	679.90	—28.40	—4.01

## MODELS, LASTS, AND PATTERNS — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	6	-	6	11	-	11
\$5 but under \$6, . . . . .	11	-	11	14	-	14
\$6 but under \$7, . . . . .	13	-	13	24	-	24
\$7 but under \$8, . . . . .	15	-	15	14	-	14
\$8 but under \$9, . . . . .	10	-	10	12	-	12
\$9 but under \$10, . . . . .	33	-	33	22	1	23
\$10 but under \$12, . . . . .	32	-	32	40	-	40
\$12 but under \$15, . . . . .	80	-	80	99	-	99
\$15 but under \$20, . . . . .	199	-	199	170	-	170
\$20 and over, . . . . .	67	-	67	75	-	75
TOTALS, . . . . .	466	-	466	481	1	482

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	65.20	59.33	-5.87	-9.00
Average number of days in operation, . . .	289.97	286.77	-3.20	-1.10

MUSICAL INSTRUMENTS AND MATERIALS.  
1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	54	54	=	=
Number of private firms, . . . . .	38	36	-2	-5.26
Number of partners, . . . . .	61	56	-5	-8.20
Males, . . . . .	61	56	-5	-8.20
Number of corporations, . . . . .	16	18	+2	+12.50
Number of stockholders, . . . . .	241	269	+28	+11.62
Males, . . . . .	178	203	+25	+14.04
Females, . . . . .	62	65	+3	+4.84
Banks, trustees, etc., . . . . .	1	1	=	=
Aggregates : partners and stockholders, .	302	325	+23	+7.62

**MUSICAL INSTRUMENTS AND MATERIALS — 1892, 1893**  
— Continued.

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . .	\$5,036,944	\$5,298,941	+\$261,997	+5.20

**STOCK USED.    AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . .	\$2,655,058	\$1,925,262	—\$729,796	—27.49

**GOODS MADE.    AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$6,229,274	\$3,916,694	—\$2,312,580	—37.12

**PERSONS EMPLOYED.**

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	3,352	2,726	—626	—18.68
Smallest number, . . . . .	3,078	1,755	—1,323	—42.98
Greatest number, . . . . .	3,539	3,307	—232	—6.56
Excess of greatest over smallest number, .	461	1,552	+1,091	+236.66

**PERSONS EMPLOYED: BY MONTHS.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	3,155	112	3,267	3,108	101	3,209
February, . . . . .	3,140	108	3,248	3,073	98	3,171
March, . . . . .	3,132	110	3,242	3,079	102	3,181
April, . . . . .	3,222	111	3,333	3,067	107	3,174
May, . . . . .	3,209	110	3,319	2,990	107	3,097
June, . . . . .	3,174	107	3,281	2,922	100	3,022
July, . . . . .	3,165	109	3,274	2,532	79	2,611

**MUSICAL INSTRUMENTS AND MATERIALS—1892, 1893**  
— Concluded.

**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	3,186	104	3,290	1,994	65	2,059
September, . . . . .	3,263	115	3,378	1,934	67	2,001
October, . . . . .	3,306	127	3,433	2,216	76	2,292
November, . . . . .	3,320	131	3,451	2,345	79	2,424
December, . . . . .	3,337	135	3,472	2,347	88	2,435
During the entire year,* . .	1,040	8	1,048	624	8	632

\* 16 establishments in 1892; 13 establishments in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$2,210,920	\$1,712,136	—\$498,784	—22.56
Average yearly earnings, . . . . .	659.58	623.08	—31.50	—4.78

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	105	39	144	91	37	128
\$5 but under \$6, . . . . .	82	32	114	60	30	90
\$6 but under \$7, . . . . .	117	32	149	111	25	136
\$7 but under \$8, . . . . .	97	13	110	100	9	109
\$8 but under \$9, . . . . .	101	8	104	132	8	135
\$9 but under \$10, . . . . .	193	8	196	214	4	218
\$10 but under \$12, . . . . .	442	6	448	368	3	371
\$12 but under \$15, . . . . .	793	2	795	693	5	698
\$15 but under \$20, . . . . .	1,054	—	1,054	1,000	—	1,000
\$20 and over, . . . . .	375	—	375	326	—	326
TOTALS, . . . . .	3,359	130	3,489	3,095	116	3,211

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	74.26	60.33	—13.93	—18.76
Average number of days in operation, . .	298.19	261.84	—33.35	—11.16

## OILS AND ILLUMINATING FLUIDS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	10	10	=	=
Number of private firms, . . . . .	8	8	=	=
Number of partners, . . . . .	12	13	+1	+8.33
Males, . . . . .	11	13	+2	+18.18
Females, . . . . .	1	-	-1	-100.00
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	57	61	+4	+7.02
Males, . . . . .	35	36	+1	+2.86
Females, . . . . .	21	21	=	=
Banks, trustees, etc., . . . . .	1	4	+3	+300.00
Aggregates: partners and stockholders, .	69	74	+5	+7.25

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$605,000	\$711,019	+\$106,019	+17.52

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$908,161	\$811,599	-\$96,562	-10.63

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,057,102	\$971,265	-\$85,837	-8.12



## OILS AND ILLUMINATING FLUIDS — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	150	140	-10	-6.67
Smallest number, . . . . .	122	104	-18	-14.75
Greatest number, . . . . .	202	227	+25	+12.38
Excess of greatest over smallest number, .	80	123	+43	+53.75

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	171	26	197	187	23	210
February, . . . . .	167	26	193	185	23	208
March, . . . . .	162	26	188	131	11	142
April, . . . . .	125	24	149	124	10	134
May, . . . . .	110	23	133	119	7	126
June, . . . . .	110	24	134	112	9	121
July, . . . . .	106	22	128	111	10	121
August, . . . . .	103	22	125	109	12	121
September, . . . . .	107	22	129	102	12	114
October, . . . . .	116	22	138	108	13	121
November, . . . . .	117	21	138	115	11	126
December, . . . . .	126	21	147	120	11	131
During the entire year,* . .	17	3	20	20	1	21

\* 2 establishments in 1892; 2 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$68,365	\$66,746	-\$1,619	-2.37
Average yearly earnings, . . . . .	455.77	476.76	+20.99	+4.61

**OILS AND ILLUMINATING FLUIDS — 1892, 1893 — Concluded.**  
**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	6	24	30	6	18	24
\$5 but under \$6, . . . . .	1	-	1	1	2	3
\$6 but under \$7, . . . . .	2	-	2	6	6	12
\$7 but under \$8, . . . . .	1	-	1	1	-	1
\$8 but under \$9, . . . . .	-	-	-	1	-	1
\$9 but under \$10, . . . . .	24	-	24	75	-	75
\$10 but under \$12, . . . . .	65	-	65	55	-	55
\$12 but under \$15, . . . . .	34	4	38	35	-	35
\$15 but under \$20, . . . . .	9	-	9	14	-	14
\$20 and over, . . . . .	-	-	-	-	-	-
<b>TOTALS, . . . . .</b>	<b>142</b>	<b>28</b>	<b>170</b>	<b>194</b>	<b>26</b>	<b>220</b>

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and days	Percent- ages
Average proportion of business done, . . .	64.20	54.50	-9.70	-15.11
Average number of days in operation, . . .	306.17	305.73	-0.44	-0.14

**PAINTS, COLORS, AND CRUDE CHEMICALS.**  
**1892, 1893.**

**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	20	20	=	=
Number of private firms, . . . . .	16	14	-2	-12.50
Number of partners, . . . . .	35	27	-8	-22.86
Males, . . . . .	34	27	-7	-20.59
Special, . . . . .	1	-	-1	-100.00
Number of corporations, . . . . .	4	6	+2	+50.00
Number of stockholders, . . . . .	54	72	+18	+33.33
Males, . . . . .	46	60	+14	+30.43
Females, . . . . .	8	12	+4	+50.00
Aggregates: partners and stockholders, .	89	99	+10	+11.24

**PAINTS, COLORS, AND CRUDE CHEMICALS — 1892, 1893**  
— Continued.

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$1,181,406	\$1,003,364	—\$178,041	—15.07

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$778,722	\$693,701	—\$85,021	—10.92

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,284,909	\$1,247,716	—\$37,193	—2.90

**PERSONS EMPLOYED.**

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	226	221	—5	—2.21
Smallest number, . . . . .	191	180	—11	—5.76
Greatest number, . . . . .	249	264	+15	+6.02
Excess of greatest over smallest number, .	58	84	+26	+44.83

**PERSONS EMPLOYED: BY MONTHS.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	198	5	203	213	6	219
February, . . . . .	207	6	213	222	7	229
March, . . . . .	219	7	226	232	8	240
April, . . . . .	229	8	237	249	9	258
May, . . . . .	228	8	236	241	9	250
June, . . . . .	227	8	235	240	10	250
July, . . . . .	221	8	229	215	9	224

**PAINTS, COLORS, AND CRUDE CHEMICALS — 1892, 1893**  
— Concluded.

**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	212	6	218	194	5	199
September, . . . . .	233	8	241	199	4	203
October, . . . . .	225	8	233	196	7	203
November, . . . . .	214	8	222	189	7	196
December, . . . . .	211	7	218	198	7	205
During the entire year,* . .	45	-	45	46	-	46

\* 8 establishments in 1892; 7 establishments in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$122,653	\$117,429	—\$5,224	—4.26
Average yearly earnings, . . . . .	542.71	531.35	—11.36	—2.09

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	10	4	14	4	2	6
\$5 but under \$6, . . . . .	8	1	9	6	5	11
\$6 but under \$7, . . . . .	7	1	8	6	1	7
\$7 but under \$8, . . . . .	7	1	8	11	-	11
\$8 but under \$9, . . . . .	6	1	6	10	2	12
\$9 but under \$10, . . . . .	65	-	65	69	-	69
\$10 but under \$12, . . . . .	48	-	48	64	-	64
\$12 but under \$15, . . . . .	56	-	56	53	-	53
\$15 but under \$20, . . . . .	21	-	21	27	-	27
\$20 and over, . . . . .	13	-	13	10	-	10
TOTALS, . . . . .	240	8	248	260	10	270

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	66.25	61.20	—5.05	—7.62
Average number of days in operation, . . .	295.77	281.61	—14.16	—4.79

**PAPER AND PAPER GOODS. 1892, 1893.****ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	98	98	=	=
Number of private firms, . . . . .	36	32	-4	-11.11
Number of partners, . . . . .	81	71	-10	-12.35
Males, . . . . .	81	70	-11	-13.58
Estates, . . . . .	-	1	+1	-
Number of corporations, . . . . .	62	66	+4	+6.45
Number of stockholders, . . . . .	1,227	1,303	+76	+6.19
Males, . . . . .	803	844	+41	+5.11
Females, . . . . .	369	393	+24	+6.50
Banks, trustees, etc., . . . . .	55	66	+11	+20.00
Aggregates: partners and stockholders, .	1,308	1,374	+66	+5.05

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$21,944,434	\$23,137,410	+\$1,192,976	+5.44

**STOCK USED. AGGREGATE VALUES.**

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$15,170,117	\$14,376,840	-\$793,277	-5.23
Bagging, . . . . .	70,456	79,567	+9,111	+12.93
Clay, . . . . .	30,582	31,482	+900	+2.94
Paper, envelope . . . . .	888,351	787,182	-101,169	-11.39
Paper, old . . . . .	374,109	342,292	-31,817	-8.50
Paper shavings, . . . . .	68,566	30,270	-38,296	-55.85
Pulp, wood . . . . .	2,011,541	1,968,149	-43,392	-2.16
Rags, cotton . . . . .	822,171	705,736	-116,435	-14.16
Rags, linen . . . . .	56,653	57,060	+407	+0.72
Rags (not specified), . . . . .	2,509,463	2,192,453	-317,010	-12.63
Waste, cotton . . . . .	99,000	106,000	+7,000	+7.07
Wood (for pulp), . . . . .	47,244	48,077	+833	+1.76
Not classified in detail, . . . . .	8,191,981	8,028,572	-163,409	-1.99

## PAPER AND PAPER GOODS — 1892, 1893 — Continued.

## STOCK USED. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measurement	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Quantities	Percentages
Bagging, . . . . .	tons	2,892½	3,403½	+510½	+17.66
Clay, . . . . .	tons	1,871½	2,140½	+269	+14.37
Paper, envelope . . . . .	tons	6,199	6,649	+550	+8.87
Paper, old . . . . .	tons	10,255½	9,698½	—557	—5.43
Paper shavings, . . . . .	tons	2,411½	935½	—1,475½	—61.20
Pulp, wood . . . . .	tons	44,728	46,683	+1,955	+4.37
Rags, cotton . . . . .	tons	15,092½	12,419	—2,673½	—17.72
Rags, linen . . . . .	tons	584½	591½	+7½	+1.24
Rags (not specified), . . . . .	tons	45,482½	36,575½	—8,907½	—19.58
Waste, cotton . . . . .	tons	2,787	3,082	+295	+8.79
Wood (for pulp), . . . . .	cords	7,874	7,474	—400	—5.08

## STOCK USED. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measurement	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Amounts	Percentages
Bagging, . . . . .	tons	\$24.36	\$23.38	—\$0.98	—4.02
Clay, . . . . .	tons	16.34	14.71	—1.63	—9.98
Paper, envelope . . . . .	tons	143.31	139.35	—3.96	—2.76
Paper, old . . . . .	tons	36.48	35.29	—1.19	—3.26
Paper shavings, . . . . .	tons	28.44	32.36	+3.92	+13.78
Pulp, wood . . . . .	tons	44.97	42.16	—2.81	—6.25
Rags, cotton . . . . .	tons	54.47	56.83	+2.36	+4.33
Rags, linen . . . . .	tons	96.97	96.47	—0.50	—0.52
Rags (not specified), . . . . .	tons	55.17	59.94	+4.77	+8.65
Waste, cotton . . . . .	tons	35.52	34.96	—0.56	—1.58
Wood (for pulp), . . . . .	cords	6.00	6.43	+0.43	+7.17

## GOODS MADE. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percentages
Total value of goods made and work done, .	\$26,029,658	\$22,746,104	—\$3,283,554	—12.61
Cardboard, . . . . .	390,011	343,749	—46,262	—11.86
Envelopes, . . . . .	1,589,254	1,477,593	—111,661	—7.03
Paper :				
Book, . . . . .	2,759,425	2,622,850	—136,575	—4.95
Building, . . . . .	299,852	267,146	—32,706	—10.91
Card, . . . . .	423,264	367,965	—55,299	—13.06
Carpet-lining, . . . . .	148,116	144,817	—3,299	—2.23

PAPER AND PAPER GOODS — 1892, 1893 — Continued.

GOODS MADE. AGGREGATE VALUES — Concluded.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Paper: — Con.				
Hanging, . . . . .	\$164,207	\$123,997	—\$40,210	—24.49
Manila, . . . . .	367,869	279,870	—87,999	—23.93
News, . . . . .	677,700	693,000	+15,300	+2.26
Surface-coated, . . . . .	727,514	822,600	+95,086	+13.07
Wrapping, . . . . .	409,627	382,552	—27,075	—6.61
Writing, . . . . .	4,593,776	3,923,231	—670,545	—14.60
Paper (not specified), . . . . .	7,313,665	6,200,456	—1,113,209	—15.23
Not classified in detail, . . . . .	6,165,378	5,096,278	—1,069,100	—17.34

GOODS MADE. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Quantities	Percent- ages
Cardboard, . . . . .	tons	4,183	3,575	—608	—14.54
Envelopes, . . . . .	thousand	1,622,617	1,718,388	+95,771	+5.90
Paper:					
Book, . . . . .	tons	25,140½	23,362½	—1,778	—7.07
Building, . . . . .	tons	4,458	4,048	—410	—9.20
Card, . . . . .	tons	4,722	4,142	—580	—12.28
Carpet-lining, . . . . .	tons	3,209	3,232½	+23½	+0.74
Hanging, . . . . .	tons	2,645½	2,414	—231½	—8.75
Manila, . . . . .	tons	5,105½	4,451	—654½	—12.82
News, . . . . .	tons	10,965	12,130	+1,165	+10.62
Surface-coated, . . . . .	tons	4,781	5,521	+740	+15.48
Wrapping, . . . . .	tons	4,558½	4,408	—150½	—3.30
Writing, . . . . .	tons	19,489	16,535½	—2,953½	—15.15
Paper (not specified), . . . . .	tons	54,788	47,879½	—6,908½	—12.61

GOODS MADE. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measure- ment	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Cardboard, . . . . .	tons	\$93.24	\$96.16	+\$2.91	+3.12
Envelopes, . . . . .	thousand	0.98	0.86	—0.12	—12.24
Paper:					
Book, . . . . .	tons	109.76	112.27	+2.51	+2.29
Building, . . . . .	tons	67.26	65.99	—1.27	—1.90
Card, . . . . .	tons	89.64	88.84	—0.80	—0.89

## PAPER AND PAPER GOODS — 1892, 1893 — Continued.

## GOODS MADE. AVERAGE VALUES — Concluded.

CLASSIFICATION.	Basis of Measure- ment	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Paper : — Con.					
Carpet-lining, . . . . .	tons	\$46.16	\$44.80	—\$1.36	—2.95
Hanging, . . . . .	tons	62.07	51.37	—10.70	—17.24
Manila, . . . . .	tons	72.06	62.88	—9.18	—12.74
News, . . . . .	tons	61.81	57.13	—4.68	—7.57
Surface-coated, . . . . .	tons	152.17	148.99	—3.18	—2.09
Wrapping, . . . . .	tons	89.86	86.79	—3.07	—3.42
Writing, . . . . .	tons	235.71	237.26	+1.55	+0.66
Paper (not specified), . . . . .	tons	133.49	129.50	—3.99	—2.99

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percentages
Average number, . . . . .	10,086	9,658	—427	—4.23
Smallest number, . . . . .	9,197	8,015	—1,182	—12.85
Greatest number, . . . . .	10,724	10,754	+30	+0.28
Excess of greatest over smallest number, . . . . .	1,527	2,739	+1,212	+79.37

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	5,253	4,499	9,752	5,548	4,570	10,118
February, . . . . .	5,281	4,554	9,835	5,598	4,591	10,189
March, . . . . .	5,395	4,616	10,011	5,671	4,620	10,291
April, . . . . .	5,388	4,609	10,057	5,609	4,692	10,301
May, . . . . .	5,430	4,637	10,067	5,578	4,581	10,159
June, . . . . .	5,476	4,654	10,130	5,553	4,517	10,070
July, . . . . .	5,519	4,613	10,132	5,322	4,460	9,782
August, . . . . .	5,443	4,571	10,014	5,080	4,077	9,157
September, . . . . .	5,471	4,654	10,125	4,827	4,032	8,859
October, . . . . .	5,588	4,718	10,306	4,845	4,099	8,944
November, . . . . .	5,587	4,696	10,283	4,942	4,121	9,063
December, . . . . .	5,593	4,639	10,282	5,052	4,150	9,202
During the entire year,* . . . . .	912	622	1,534	303	148	451

\* 20 establishments in 1892; 7 establishments in 1893.



## PAPER AND PAPER GOODS — 1892, 1893 — Concluded.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$4,209,280	\$3,957,802	—\$311,428	—7.29
Average yearly earnings, . . . . .	423.32	409.80	—13.52	—3.19

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	194	1,047	1,241	193	1,160	1,353
\$5 but under \$6, . . . . .	113	1,279	1,392	131	1,182	1,313
\$6 but under \$7, . . . . .	208	1,180	1,388	253	1,184	1,437
\$7 but under \$8, . . . . .	629	786	1,415	667	606	1,273
\$8 but under \$9, . . . . .	629	308	937	588	325	913
\$9 but under \$10, . . . . .	1,379	142	1,521	1,307	149	1,456
\$10 but under \$12, . . . . .	824	54	878	790	47	837
\$12 but under \$15, . . . . .	879	9	888	838	16	854
\$15 but under \$20, . . . . .	721	6	727	583	6	589
\$20 and over, . . . . .	198	—	198	201	—	201
TOTALS, . . . . .	6,774	4,811	10,585	6,551	4,675	10,226

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	84.98	73.66	—11.32	—13.33
Average number of days in operation, . . .	289.99	276.52	—13.47	—4.64

## PERFUMES, TOILET ARTICLES, ETC. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	5	5	=	=
Number of private firms, . . . . .	3	3	=	=
Number of partners, . . . . .	3	3	=	=
Males, . . . . .	3	3	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	7	7	=	=
Males, . . . . .	7	7	=	=
Aggregates: partners and stockholders, .	10	10	=	=

PERFUMES, TOILET ARTICLES, ETC. — 1892, 1893 — Continued.

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$149,000	\$147,450	—\$1,550	—1.04

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$143,445	\$196,640	+\$53,195	+37.08

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$283,481	\$252,419	—\$31,062	—10.96

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	43	39	—4	—9.30
Smallest number, . . . . .	37	31	—6	—16.22
Greatest number, . . . . .	48	49	+1	+2.08
Excess of greatest over smallest number, .	11	18	+7	+63.64

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	16	27	43	16	25	41
February, . . . . .	16	27	43	17	27	44
March, . . . . .	16	26	42	17	25	42
April, . . . . .	16	28	44	20	25	45
May, . . . . .	16	27	43	16	25	41
June, . . . . .	16	24	40	17	25	42
July, . . . . .	16	24	40	16	18	34

## PERFUMES, TOILET ARTICLES, ETC. — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	16	22	38	16	18	34
September, . . . . .	16	25	41	16	21	37
October, . . . . .	16	27	43	15	24	39
November, . . . . .	16	28	44	14	24	38
December, . . . . .	17	30	47	13	23	35
During the entire year,* . .	5	12	17	5	9	14

\* 2 establishments in 1892 and in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$16,818	\$15,616	—\$702	—4.30
Average yearly earnings, . . . . .	379.49	400.41	+20.92	+5.51

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	2	6	8	1	—	1
\$5 but under \$6, . . . . .	—	1	1	—	9	9
\$6 but under \$7, . . . . .	1	15	16	2	8	10
\$7 but under \$8, . . . . .	1	—	1	1	2	3
\$8 but under \$9, . . . . .	1	7	8	4	4	8
\$9 but under \$10, . . . . .	1	1	2	1	2	3
\$10 but under \$12, . . . . .	1	—	1	3	3	6
\$12 but under \$15, . . . . .	2	—	2	2	—	2
\$15 but under \$20, . . . . .	7	—	7	5	—	5
\$20 and over, . . . . .	—	—	—	1	—	1
TOTALS, . . . . .	16	30	46	20	23	43

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	80.00	60.00	—20.00	—25.00
Average number of days in operation, . . .	303.86	289.18	—14.68	—4.83

# PHOTOGRAPHS AND PHOTOGRAPHIC MATERIALS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	17	17	=	=
Number of private firms, . . . . .	16	16	=	=
Number of partners, . . . . .	20	19	-1	-5.00
Males, . . . . .	19	18	-1	-5.26
Females, . . . . .	1	1	=	=
Number of corporations, . . . . .	1	1	=	=
Number of stockholders, . . . . .	19	9	-10	-52.63
Males, . . . . .	19	9	-10	-52.63
Aggregates: partners and stockholders, .	39	28	-11	-28.21

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$206,925	\$172,844	-\$34,081	-16.47

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$103,272	\$60,772	-\$42,500	-41.15

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$317,583	\$236,766	-\$80,817	-25.45

**PHOTOGRAPHS AND PHOTOGRAPHIC MATERIALS — 1892, 1893**  
— Continued.

**PERSONS EMPLOYED.**

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	157	128	-29	-18.47
Smallest number, . . . . .	131	104	-27	-20.61
Greatest number, . . . . .	174	146	-28	-16.09
Excess of greatest over smallest number, .	43	42	-1	-2.33

**PERSONS EMPLOYED: BY MONTHS.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	90	68	158	80	54	134
February, . . . . .	91	66	157	79	54	133
March, . . . . .	94	65	159	85	54	139
April, . . . . .	96	65	161	86	55	141
May, . . . . .	94	63	157	85	55	140
June, . . . . .	96	69	165	80	55	135
July, . . . . .	87	67	154	71	52	123
August, . . . . .	79	57	136	64	44	108
September, . . . . .	89	65	154	68	53	121
October, . . . . .	90	65	155	70	52	122
November, . . . . .	90	65	155	71	51	122
December, . . . . .	99	69	168	77	52	129
During the entire year,* . . .	15	11	26	13	10	23

\* 8 establishments in 1892; 7 establishments in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$99,905	\$80,876	-\$19,029	-19.05
Average yearly earnings, . . . . .	636.84	631.84	-4.60	-0.71

PHOTOGRAPHS AND PHOTOGRAPHIC MATERIALS — 1892, 1893  
— Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	7	-	7	6	2	8
\$5 but under \$6, . . . . .	3	2	5	2	1	3
\$6 but under \$7, . . . . .	3	8	11	3	11	14
\$7 but under \$8, . . . . .	3	7	10	3	5	8
\$8 but under \$9, . . . . .	3	12	15	4	13	17
\$9 but under \$10, . . . . .	6	9	15	9	10	19
\$10 but under \$12, . . . . .	16	14	30	13	5	18
\$12 but under \$15, . . . . .	22	15	37	13	5	23
\$15 but under \$20, . . . . .	20	5	25	11	3	14
\$20 and over, . . . . .	23	1	24	19	-	19
TOTALS, . . . . .	106	73	179	88	55	143

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	56.35	46.94	-9.41	-16.70
Average number of days in operation, . . .	304.22	301.32	-2.90	-0.95

POLISHES AND DRESSING. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	29	29	=	=
Number of private firms, . . . . .	26	24	-2	-7.69
Number of partners, . . . . .	45	42	-3	-6.67
Males, . . . . .	42	38	-4	-9.52
Females, . . . . .	3	3	=	=
Special, . . . . .	-	1	+1	-
Number of corporations, . . . . .	3	5	+2	+66.67
Number of stockholders, . . . . .	31	39	+8	+25.81
Males, . . . . .	25	31	+6	+24.00
Females, . . . . .	5	7	+2	+40.00
Banks, trustees, etc., . . . . .	1	1	=	=
Aggregates: partners and stockholders, .	76	81	+5	+6.58

## POLISHES AND DRESSING — 1892, 1893 — Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$976,084	\$1,014,723	+\$38,639	+3.96

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$1,182,792	\$991,399	—\$141,393	—12.48

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,987,454	\$1,814,405	—\$173,049	—8.71

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	286	279	—7	—2.45
Smallest number, . . . . .	185	175	—10	—5.41
Greatest number, . . . . .	331	355	+24	+7.25
Excess of greatest over smallest number, .	146	180	+34	+23.29

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	151	113	264	156	86	242
February, . . . . .	162	114	266	162	107	269
March, . . . . .	164	130	284	162	118	280
April, . . . . .	152	154	306	165	158	323
May, . . . . .	151	155	306	164	168	332
June, . . . . .	160	157	317	158	167	325
July, . . . . .	162	148	310	151	135	286

## POLISHES AND DRESSING — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	140	89	229	140	129	269
September, . . . . .	156	144	300	131	118	249
October, . . . . .	153	133	286	139	168	307
November, . . . . .	150	127	277	135	114	249
December, . . . . .	162	107	269	132	97	229
During the entire year,* . .	67	9	76	62	7	69

\* 13 establishments in 1892 and in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$139,184	\$136,845	—\$2,339	—1.68
Average yearly earnings, . . . . .	486.66	490.48	+\$3.82	+0.78

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	8	67	75	2	74	76
\$5 but under \$6, . . . . .	4	16	20	4	10	14
\$6 but under \$7, . . . . .	5	23	33	2	47	49
\$7 but under \$8, . . . . .	8	6	14	2	30	32
\$8 but under \$9, . . . . .	6	11	17	11	21	32
\$9 but under \$10, . . . . .	15	12	27	21	7	28
\$10 but under \$12, . . . . .	16	23	39	29	1	30
\$12 but under \$15, . . . . .	50	3	53	55	—	55
\$15 but under \$20, . . . . .	36	—	36	29	—	29
\$20 and over, . . . . .	18	—	18	19	—	19
TOTALS, . . . . .	166	166	332	174	190	364

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND • DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	65.17	54.28	—10.89	—16.71
Average number of days in operation, . . .	294.48	286.08	—8.40	—2.85



# **PRINTING, PUBLISHING, AND BOOKBINDING.** **1892, 1893.**

## **ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	34	34	=	=
Number of private firms, . . . . .	24	23	-1	-4.17
Number of partners, . . . . .	41	39	-2	-4.88
Males, . . . . .	40	37	-3	-7.50
Females, . . . . .	1	1	=	=
Special, . . . . .	-	1	+1	-
Number of corporations, . . . . .	10	11	+1	+10.00
Number of stockholders, . . . . .	93	99	+6	+6.45
Males, . . . . .	74	78	+4	+5.41
Females, . . . . .	17	20	+3	+17.65
Banks, trustees, etc., . . . . .	2	1	-1	-50.00
Aggregates: partners and stockholders, .	134	138	+4	+2.99

## **CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$3,840,023	\$3,921,071	+\$81,048	+2.11

## **STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$1,210,015	\$1,203,208	-\$6,807	-0.56

## **GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$4,397,204	\$4,447,606	+\$50,402	+1.15

**PRINTING, PUBLISHING, AND BOOKBINDING — 1892, 1893**  
— Continued.

**PERSONS EMPLOYED.**

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number . . . . .	2,194	2,141	—53	—2.42
Smallest number, . . . . .	2,038	1,995	—43	—2.11
Greatest number, . . . . .	2,379	2,315	—64	—2.69
Excess of greatest over smallest number, .	341	320	—21	—6.16

**PERSONS EMPLOYED: BY MONTHS.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	1,550	680	2,230	1,514	681	2,195
February, . . . . .	1,532	676	2,208	1,512	657	2,169
March, . . . . .	1,515	668	2,213	1,515	659	2,174
April, . . . . .	1,517	650	2,167	1,511	660	2,171
May, . . . . .	1,504	654	2,158	1,511	627	2,138
June, . . . . .	1,497	646	2,143	1,503	659	2,162
July, . . . . .	1,498	644	2,142	1,495	671	2,166
August, . . . . .	1,482	619	2,101	1,458	627	2,085
September, . . . . .	1,502	631	2,133	1,464	648	2,112
October, . . . . .	1,542	685	2,227	1,501	655	2,156
November, . . . . .	1,561	693	2,244	1,505	641	2,146
December, . . . . .	1,601	725	2,326	1,501	679	2,180
During the entire year,* . .	191	89	280	70	82	102

\* 9 establishments in 1892; 7 establishments in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,198,585	\$1,238,803	+\$40,218	+3.36
Average yearly earnings, . . . . .	546.80	578.61	+32.31	+5.91

**PRINTING, PUBLISHING, AND BOOKBINDING — 1892, 1893**  
— Concluded.

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	179	185	364	194	182	376
\$5 but under \$6, . . . . .	82	100	182	94	99	193
\$6 but under \$7, . . . . .	68	128	196	76	147	223
\$7 but under \$8, . . . . .	68	124	192	50	143	193
\$8 but under \$9, . . . . .	61	82	143	56	59	115
\$9 but under \$10, . . . . .	97	39	136	82	43	125
\$10 but under \$12, . . . . .	210	60	270	199	49	248
\$12 but under \$15, . . . . .	199	24	223	195	20	215
\$15 but under \$20, . . . . .	351	8	359	329	12	341
\$20 and over, . . . . .	314	3	317	310	3	313
<b>TOTALS, . . . . .</b>	<b>1,629</b>	<b>753</b>	<b>2,382</b>	<b>1,585</b>	<b>756</b>	<b>2,341</b>

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	72.53	66.06	-6.47	-8.92
Average number of days in operation, . . .	305.14	303.01	-2.13	-0.70

**PRINT WORKS, DYE WORKS, AND BLEACHERIES**  
**1892, 1893.**

**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	44	44	=	=
Number of private firms, . . . . .	30	30	=	=
Number of partners, . . . . .	43	44	+1	+2.33
Males, . . . . .	38	40	+2	+5.26
Females, . . . . .	3	4	+1	+33.33
Special, . . . . .	2	-	-2	-100.00
Number of corporations, . . . . .	14	14	=	=
Number of stockholders, . . . . .	1,528	1,541	+13	+0.85
Males, . . . . .	613	606	-7	-1.14
Females, . . . . .	463	481	+18	+3.89
Banks, trustees, etc., . . . . .	452	454	+2	+0.44
Aggregates: partners and stockholders, .	1,571	1,585	+14	+0.89

PRINT WORKS, DYE WORKS, AND BLEACHERIES — 1892, 1893  
— Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . .	\$15,551,307	\$17,138,649	+\$1,587,342	+10.21

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . .	\$14,117,102	\$13,664,265	—\$452,837	—3.21

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$20,260,330	\$18,956,125	—\$1,304,205	—6.44

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	6,014	5,809	—205	—3.41
Smallest number, . . . . .	5,371	3,683	—1,788	—33.29
Greatest number, . . . . .	6,506	6,654	+148	+2.27
Excess of greatest over smallest number, .	1,135	3,071	+1,936	+170.57

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892 .			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	4,654	1,265	5,919	4,890	1,310	6,200
February, . . . . .	4,748	1,269	6,017	4,916	1,306	6,222
March, . . . . .	4,786	1,307	6,093	4,999	1,375	6,374
April, . . . . .	4,648	1,336	5,984	5,009	1,342	6,351
May, . . . . .	4,655	1,309	5,964	4,984	1,323	6,312
June, . . . . .	4,711	1,311	6,022	4,918	1,293	6,216
July, . . . . .	4,493	1,238	5,731	4,475	1,216	5,691

PRINT WORKS, DYE WORKS, AND BLEACHERIES — 1892, 1893  
— Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	4,732	1,272	6,004	4,205	871	5,076
September, . . . . .	4,758	1,306	6,064	3,113	897	4,010
October, . . . . .	4,796	1,339	6,135	4,306	1,268	5,574
November, . . . . .	4,756	1,314	6,070	4,519	1,263	5,782
December, . . . . .	4,717	1,238	6,005	4,603	1,253	5,856
During the entire year,* . . . . .	31	17	48	28	18	46

\* 6 establishments in 1892; 5 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$2,599,143	\$2,425,173	—\$173,970	—6.69
Average yearly earnings, . . . . .	432.18	417.49	—14.69	—3.40

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	670	315	985	619	266	885
\$5 but under \$6, . . . . .	208	363	571	306	363	674
\$6 but under \$7, . . . . .	623	497	1,120	497	501	998
\$7 but under \$8, . . . . .	1,222	138	1,360	1,270	166	1,436
\$8 but under \$9, . . . . .	622	58	680	677	72	749
\$9 but under \$10, . . . . .	612	42	654	643	36	679
\$10 but under \$12, . . . . .	887	23	910	415	18	433
\$12 but under \$15, . . . . .	318	8	326	319	4	323
\$15 but under \$20, . . . . .	166	1	167	189	1	190
\$20 and over, . . . . .	250	—	250	219	—	219
TOTALS, . . . . .	5,078	1,440	6,518	5,184	1,432	6,616

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	68.09	61.86	—6.23	—9.15
Average number of days in operation, . . . . .	300.13	266.82	—33.31	—11.10

# RAILROAD CONSTRUCTION AND EQUIPMENT. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	14	14	=	=
Number of private firms, . . . . .	2	2	=	=
Number of partners, . . . . .	3	3	=	=
Males, . . . . .	3	3	=	=
Number of corporations, . . . . .	12	12	=	=
Number of stockholders, . . . . .	40	42	+2	+5.00
Males, . . . . .	21	22	+1	+4.76
Females, . . . . .	7	7	=	=
Banks, trustees, etc., . . . . .	2	3	+1	+50.00
Railroads, . . . . .	10	10	=	=
Aggregates: partners and stockholders, .	43	45	+2	+4.65

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$1,777,000	\$1,762,000	-\$15,000	-0.84;

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$2,226,418	\$4,674,579	+\$2,448,161	+109.96

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$4,275,835	\$7,255,656	+\$2,979,821	+69.69

RAILROAD CONSTRUCTION AND EQUIPMENT — 1892, 1893  
— Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	2,971	3,715	+744	+25.04
Smallest number, . . . . .	2,557	3,004	+447	+17.45
Greatest number, . . . . .	3,233	4,410	+1,123	+34.12
Excess of greatest over smallest number, .	731	1,406	+675	+92.34

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	2,791	-	2,791	3,760	6	3,766
February, . . . . .	2,957	-	2,957	3,897	4	3,901
March, . . . . .	3,031	-	3,031	4,229	4	4,233
April, . . . . .	3,036	-	3,036	4,306	5	4,311
May, . . . . .	3,078	-	3,078	4,099	9	4,108
June, . . . . .	3,005	-	3,005	3,961	4	3,965
July, . . . . .	2,964	-	2,964	3,700	46	3,746
August, . . . . .	2,814	-	2,814	3,405	47	3,452
September, . . . . .	2,842	-	2,842	3,296	47	3,343
October, . . . . .	2,983	-	2,983	3,219	46	3,265
November, . . . . .	3,081	-	3,081	3,218	41	3,259
December, . . . . .	2,965	-	2,965	3,169	42	3,211

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,783,725	\$2,236,271	+\$502,546	+28.17
Average yearly earnings, . . . . .	600.38	615.42	+15.04	+2.51

RAILROAD CONSTRUCTION AND EQUIPMENT—1892, 1893  
— Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	22	-	22	39	1	40
\$5 but under \$6, . . . . .	11	-	11	31	4	35
\$6 but under \$7, . . . . .	48	-	48	66	14	80
\$7 but under \$8, . . . . .	68	-	68	123	18	141
\$8 but under \$9, . . . . .	143	-	143	128	8	136
\$9 but under \$10, . . . . .	571	-	571	664	-	664
\$10 but under \$12, . . . . .	559	-	559	961	-	961
\$12 but under \$15, . . . . .	1,337	-	1,337	1,948	1	1,949
\$15 but under \$20, . . . . .	508	-	508	916	-	916
\$20 and over, . . . . .	44	-	44	101	-	101
TOTALS, . . . . .	3,311	-	3,311	4,977	46	5,023

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	89.43	83.36	-6.07	-6.79
Average number of days in operation, . . .	300.63	291.64	-8.99	-2.99

## RUBBER AND ELASTIC GOODS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	34	34	=	=
Number of private firms, . . . . .	18	18	=	=
Number of partners, . . . . .	31	32	+1	+3.23
Males, . . . . .	30	31	+1	+3.33
Females, . . . . .	1	1	=	=
Number of corporations, . . . . .	16	16	=	=
Number of stockholders, . . . . .	689	769	+80	+11.61
Males, . . . . .	375	407	+32	+8.53
Females, . . . . .	253	295	+42	+16.60
Banks, trustees, etc., . . . . .	61	67	+6	+9.84
Aggregates: partners and stockholders, .	720	801	+81	+11.25



**RUBBER AND ELASTIC GOODS — 1892, 1893 — Continued.**  
**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$10,344,439	\$11,148,812	+\$804,373	+7.78

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$9,824,076	\$9,916,476	+\$92,400	+0.94

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$14,244,814	\$14,506,016	+\$261,202	+1.83

**PERSONS EMPLOYED.**

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	6,021	6,161	+140	+2.33
Smallest number, . . . . .	5,353	5,263	—90	—1.65
Greatest number, . . . . .	6,639	6,833	+194	+2.92
Excess of greatest over smallest number, .	1,286	1,570	+284	+22.08

**PERSONS EMPLOYED: BY MONTHS.**

MONTHS. 6	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	3,186	2,524	5,710	3,400	2,963	6,363
February, . . . . .	3,231	2,570	5,801	3,557	2,980	6,537
March, . . . . .	3,270	2,623	5,893	3,593	3,021	6,614
April, . . . . .	3,353	2,703	6,056	3,574	3,063	6,637
May, . . . . .	3,281	2,422	5,703	3,483	2,979	6,462
June, . . . . .	3,329	2,576	5,905	3,395	2,912	6,307
July, . . . . .	3,384	2,661	6,045	3,324	2,609	5,933

RUBBER AND ELASTIC GOODS — 1892, 1893 — Concluded.

PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	3,398	2,577	5,975	3,184	2,533	5,717
September, . . . . .	3,392	2,715	6,107	3,181	2,513	5,644
October, . . . . .	3,474	2,800	6,274	3,173	2,690	5,863
November, . . . . .	3,479	2,890	6,369	3,151	2,745	5,896
December, . . . . .	3,500	2,899	6,399	3,119	2,777	5,896
During the entire year,* . .	117	263	380	31	-	31

\* 7 establishments in 1892; 2 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$2,535,224	\$2,856,355	+\$321,131	+12.67
Average yearly earnings, . . . . .	421.06	463.62	+42.56	+10.11

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	125	436	611	170	535	705
\$5 but under \$6, . . . . .	112	287	399	126	312	438
\$6 but under \$7, . . . . .	113	416	529	98	360	458
\$7 but under \$8, . . . . .	206	496	702	202	527	729
\$8 but under \$9, . . . . .	465	420	885	489	412	901
\$9 but under \$10, . . . . .	779	446	1,225	814	443	1,257
\$10 but under \$12, . . . . .	585	319	904	497	309	866
\$12 but under \$15, . . . . .	562	52	614	546	94	640
\$15 but under \$20, . . . . .	505	11	516	530	7	537
\$20 and over, . . . . .	82	-	82	90	-	90
TOTALS, . . . . .	3,534	2,933	6,467	3,562	3,059	6,621

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	74.59	65.74	-8.85	-11.86
Average number of days in operation, . . .	281.15	284.55	+3.40	+1.21

**SADDLERY AND HARNESS. 1892, 1893.****ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (-), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	33	33	=	=
Number of private firms, . . . . .	36	36	=	=
Number of partners, . . . . .	44	43	-1	-2.27
Males, . . . . .	44	42	-2	-4.55
Estates, . . . . .	-	1	+1	-
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	82	79	-3	-3.66
Males, . . . . .	61	65	+4	+6.56
Females, . . . . .	21	14	-7	-33.33
Aggregates: partners and stockholders, .	126	122	-4	-3.17

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$274,363	\$256,850	-\$17,513	-6.33

**STOCK USED. AGGREGATE VALUES.**

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$243,544	\$178,077	-\$65,467	-26.88

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$518,097	\$386,487	-\$132,210	-25.49

## SADDLERY AND HARNESS — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	258	206	-52	-20.16
Smallest number, . . . . .	233	168	-65	-27.90
Greatest number, . . . . .	284	242	-42	-14.79
Excess of greatest over smallest number, .	51	74	+23	+45.10

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	221	23	244	211	18	229
February, . . . . .	226	23	249	204	19	223
March, . . . . .	228	22	250	203	18	221
April, . . . . .	241	23	264	206	15	221
May, . . . . .	244	25	269	197	21	218
June, . . . . .	245	24	269	200	18	218
July, . . . . .	251	24	275	188	18	206
August, . . . . .	250	25	275	178	15	193
September, . . . . .	246	26	272	167	14	181
October, . . . . .	232	24	256	168	15	178
November, . . . . .	219	24	243	166	13	179
December, . . . . .	212	23	235	170	14	184
During the entire year,* . .	88	5	93	52	-	52

\* 22 establishments in 1892; 17 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$140,956	\$106,704	-\$34,252	-24.30
Average yearly earnings, . . . . .	546.34	517.98	-28.36	-5.19

**SCIENTIFIC INSTRUMENTS AND APPLIANCES — 1892, 1893**  
— Concluded.

**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	1,077	151	1,228	869	139	1,008
September, . . . . .	1,041	151	1,192	723	119	842
October, . . . . .	1,054	156	1,210	753	127	880
November, . . . . .	1,076	155	1,231	755	133	888
December, . . . . .	1,063	156	1,239	700	133	833
During the entire year,* . .	7	2	9	7	2	9

\* 4 establishments in 1892 and in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$535,271	\$449,456	—\$85,815	—16.03
Average yearly earnings, . . . . .	447.93	417.71	—30.22	—6.75

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	111	58	169	89	56	145
\$5 but under \$6, . . . . .	75	29	104	68	25	93
\$6 but under \$7, . . . . .	99	54	153	84	50	134
\$7 but under \$8, . . . . .	119	8	127	109	8	117
\$8 but under \$9, . . . . .	100	4	104	84	4	88
\$9 but under \$10, . . . . .	140	3	143	181	1	182
\$10 but under \$12, . . . . .	139	2	141	142	3	145
\$12 but under \$15, . . . . .	182	2	184	168	1	169
\$15 but under \$20, . . . . .	166	3	169	166	3	169
\$20 and over, . . . . .	39	4	43	27	—	27
TOTALS, . . . . .	1,170	167	1,337	1,117	151	1,268

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	64.00	55.80	—8.20	—12.81
Average number of days in operation, . . .	301.22	289.49	—11.73	—3.90

**SHIPBUILDING. 1892, 1893.**  
**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	56	56	=	=
Number of private firms, . . . . .	54	54	=	=
Number of partners, . . . . .	76	74	-2	-2.63
Males, . . . . .	75	73	-2	-2.67
Females, . . . . .	1	1	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	23	49	+21	+75.00
Males, . . . . .	22	38	+16	+72.73
Females, . . . . .	5	11	+6	+120.00
Banks, trustees, etc., . . . . .	1	-	-1	-100.00
Aggregates: partners and stockholders, .	104	123	+19	+18.27

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$749,687	\$924,913	+\$175,226	+23.37

**STOCK USED. AGGREGATE VALUES.**

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$433,606	\$463,816	+\$30,210	+6.97

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,191,999	\$1,114,403	-\$77,596	-6.51

**SCIENTIFIC INSTRUMENTS AND APPLIANCES — 1892, 1893**  
— Concluded.

**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	1,077	151	1,228	869	139	1,008
September, . . . . .	1,041	151	1,192	723	119	842
October, . . . . .	1,054	156	1,210	753	127	880
November, . . . . .	1,076	155	1,231	755	133	888
December, . . . . .	1,063	156	1,239	700	133	833
During the entire year,* . .	7	2	9	7	2	9

\* 4 establishments in 1892 and in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$535,271	\$449,456	—\$85,815	—16.03
Average yearly earnings, . . . . .	447.93	417.71	—30.22	—6.75

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	111	58	169	89	56	145
\$5 but under \$6, . . . . .	75	29	104	68	25	93
\$6 but under \$7, . . . . .	99	54	153	84	50	134
\$7 but under \$8, . . . . .	119	8	127	109	8	117
\$8 but under \$9, . . . . .	100	4	104	84	4	88
\$9 but under \$10, . . . . .	140	3	143	181	1	182
\$10 but under \$12, . . . . .	139	2	141	142	3	145
\$12 but under \$15, . . . . .	182	2	184	168	1	169
\$15 but under \$20, . . . . .	166	3	169	165	3	168
\$20 and over, . . . . .	89	4	93	27	—	27
TOTALS, . . . . .	1,170	167	1,337	1,117	151	1,268

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	64.00	55.80	—8.20	—12.81
Average number of days in operation, . . . . .	301.22	289.49	—11.73	—3.89

## SHIPBUILDING. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	56	56	=	=
Number of private firms, . . . . .	54	54	=	=
Number of partners, . . . . .	76	74	-2	-2.63
Males, . . . . .	75	73	-2	-2.67
Females, . . . . .	1	1	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	23	49	+21	+75.00
Males, . . . . .	22	38	+16	+72.73
Females, . . . . .	5	11	+6	+120.00
Banks, trustees, etc., . . . . .	1	-	-1	-100.00
Aggregates: partners and stockholders, .	104	123	+19	+18.27

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$749,687	\$924,913	+\$175,226	+23.37

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$433,606	\$463,816	+\$30,210	+6.97

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,191,999	\$1,114,403	-\$77,596	-6.51



## SHIPBUILDING — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	665	672	+7	+1.05
Smallest number, . . . . .	400	408	+8	+2.00
Greatest number, . . . . .	1,011	1,076	+65	+6.43
Excess of greatest over smallest number, .	611	668	+57	+9.33

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	609	-	609	540	-	540
February, . . . . .	593	-	593	553	-	553
March, . . . . .	661	-	661	664	-	664
April, . . . . .	735	-	735	873	-	873
May, . . . . .	741	-	741	912	-	912
June, . . . . .	712	-	712	812	-	812
July, . . . . .	630	-	630	728	-	728
August, . . . . .	574	-	574	611	-	611
September, . . . . .	583	-	583	540	-	540
October, . . . . .	633	-	633	608	-	608
November, . . . . .	702	-	702	632	-	632
December, . . . . .	766	-	766	572	-	572
During the entire year,* . . .	74	-	74	38	-	38

\* 10 establishments in 1892; 7 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$467,672	\$458,900	-\$8,772	-1.83
Average yearly earnings, . . . . .	703.27	662.89	-20.38	-2.90

SHIPBUILDING — 1892, 1893 — Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	35	-	35	61	-	61
\$5 but under \$6, . . . .	13	-	13	31	-	31
\$6 but under \$7, . . . .	19	-	19	20	-	20
\$7 but under \$8, . . . .	51	-	51	35	-	35
\$8 but under \$9, . . . .	45	-	45	20	-	20
\$9 but under \$10, . . . .	77	-	77	113	-	113
\$10 but under \$12, . . . .	145	-	145	114	-	114
\$12 but under \$15, . . . .	224	-	224	242	-	242
\$15 but under \$20, . . . .	381	-	381	402	-	402
\$20 and over, . . . . .	96	-	96	107	-	107
TOTALS, . . . . .	1,086	-	1,086	1,145	-	1,145

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	44.16	40.82	-3.34	-7.56
Average number of days in operation, . . .	295.98	293.40	-2.58	-0.87

SILK AND SILK GOODS. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	12	12	=	=
Number of private firms, . . . . .	6	5	-1	-16.67
Number of partners, . . . . .	10	7	-3	-30.00
Males, . . . . .	9	6	-3	-33.33
Females, . . . . .	1	1	=	=
Number of corporations, . . . . .	6	7	+1	+16.67
Number of stockholders, . . . . .	243	217	-26	-10.70
Males, . . . . .	194	172	-22	-11.34
Females, . . . . .	47	40	-7	-14.89
Banks, trustees, etc., . . . . .	2	5	+3	+150.00
Aggregates : partners and stockholders, .	253	224	-29	-11.46

## SILK AND SILK GOODS — 1892, 1893 — Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$2,345,741	\$2,631,400	+\$285,719	+12.18

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$3,133,633	\$2,736,744	-\$401,889	-12.80

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$4,952,024	\$3,939,629	-\$1,012,395	-20.44

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	2,343	2,233	-110	-4.69
Smallest number, . . . . .	2,185	1,851	-334	-15.29
Greatest number, . . . . .	2,495	2,518	+23	+0.92
Excess of greatest over smallest number, .	310	667	+357	+115.16

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	667	1,590	2,257	718	1,646	2,364
February, . . . . .	685	1,602	2,277	721	1,658	2,379
March, . . . . .	713	1,517	2,230	716	1,638	2,354
April, . . . . .	706	1,644	2,350	727	1,665	2,392
May, . . . . .	714	1,602	2,316	720	1,646	2,366
June, . . . . .	707	1,611	2,318	742	1,659	2,401
July, . . . . .	713	1,611	2,324	724	1,616	2,340

**SILK AND SILK GOODS — 1892, 1893 — Concluded.**  
**PERSONS EMPLOYED: BY MONTHS — Concluded.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	716	1,546	2,262	631	1,496	2,179
September, . . . . .	712	1,622	2,334	617	1,333	1,956
October, . . . . .	721	1,671	2,392	642	1,378	2,020
November, . . . . .	737	1,719	2,456	630	1,365	2,004
December, . . . . .	731	1,705	2,436	630	1,389	2,019
During the entire year,* . . . . .	10	43	53	-	-	-

\* 2 establishments in 1892.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$798,801	\$729,114	-\$69,687	-8.72
Average yearly earnings, . . . . .	340.93	326.52	-14.41	-4.23

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	72	355	427	70	341	411
\$5 but under \$6, . . . . .	79	526	605	80	491	571
\$6 but under \$7, . . . . .	96	374	470	99	438	537
\$7 but under \$8, . . . . .	59	129	188	51	156	207
\$8 but under \$9, . . . . .	62	65	127	61	66	127
\$9 but under \$10, . . . . .	80	68	148	94	73	167
\$10 but under \$12, . . . . .	101	147	248	100	110	210
\$12 but under \$15, . . . . .	135	22	157	149	23	172
\$15 but under \$20, . . . . .	79	1	80	73	1	74
\$20 and over, . . . . .	30	-	30	27	-	27
TOTALS, . . . . .	793	1,687	2,480	804	1,009	2,503

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	75.00	49.75	-25.25	-33.67
Average number of days in operation, . . . . .	300.71	261.73	-38.98	-12.96

## SPORTING AND ATHLETIC GOODS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	7	7	=	=
Number of private firms, . . . . .	5	5	=	=
Number of partners, . . . . .	8	8	=	=
Males, . . . . .	7	7	=	=
Special, . . . . .	1	1	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	10	10	=	=
Males, . . . . .	10	10	=	=
Aggregates: partners and stockholders, .	18	18	=	=

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$244,013	\$246,726	+\$2,713	+1.11

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$166,508	\$139,947	-\$26,556	-15.95

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$449,765	\$335,050	-\$114,715	-25.51

SPORTING AND ATHLETIC GOODS — 1892, 1893 — Continued.  
PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	313	283	—30	—9.58
Smallest number, . . . . .	186	155	—31	—16.67
Greatest number, . . . . .	420	364	—56	—13.33
Excess of greatest over smallest number, .	234	209	—25	—10.68

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	289	43	332	322	37	359
February, . . . . .	272	46	318	300	36	336
March, . . . . .	267	45	302	310	37	347
April, . . . . .	241	43	284	289	39	328
May, . . . . .	245	40	285	285	23	308
June, . . . . .	236	40	276	288	24	312
July, . . . . .	203	27	230	238	14	252
August, . . . . .	250	28	278	176	10	186
September, . . . . .	286	36	322	206	17	223
October, . . . . .	317	37	354	214	20	234
November, . . . . .	346	41	387	227	22	249
December, . . . . .	337	42	379	237	29	266
During the entire year,* . .	87	24	111	2	—	2

\* 3 establishments in 1892; 1 establishment in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$157,733	\$134,689	—\$23,044	—14.61
Average yearly earnings, . . . . .	503.94	475.93	—28.01	—5.56

**SPORTING AND ATHLETIC GOODS — 1892, 1893 — Concluded.**  
**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	33	-	33	31	8	39
\$5 but under \$6, . . . . .	17	2	19	8	5	13
\$6 but under \$7, . . . . .	16	28	44	9	11	20
\$7 but under \$8, . . . . .	17	4	21	17	5	22
\$8 but under \$9, . . . . .	21	1	22	17	7	24
\$9 but under \$10, . . . . .	67	-	67	93	1	94
\$10 but under \$12, . . . . .	94	-	94	72	-	72
\$12 but under \$15, . . . . .	56	-	56	56	-	56
\$15 but under \$20, . . . . .	37	-	37	29	-	29
\$20 and over, . . . . .	10	-	10	6	-	6
<b>TOTALS, . . . . .</b>	<b>368</b>	<b>35</b>	<b>403</b>	<b>338</b>	<b>37</b>	<b>375</b>

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	62.86	52.57	-10.29	-16.37
Average number of days in operation, . . .	303.31	280.93	-22.38	-7.38

**STONE. 1892, 1893.**

**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	175	175	=	=
Number of private firms, . . . . .	161	161	=	=
Number of partners, . . . . .	256	248	-8	-3.15
Males, . . . . .	250	240	-10	-4.0
Females, . . . . .	6	8	+2	+33.33
Number of corporations, . . . . .	14	14	=	=
Number of stockholders, . . . . .	407	401	-6	-1.47
Males, . . . . .	290	288	-2	-0.69
Females, . . . . .	107	103	-4	-3.74
Banks, trustees, etc., . . . . .	10	10	=	=
Aggregates: partners and stockholders, . .	663	649	-14	-2.11

STONE — 1892, 1893 — Continued.

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$3,216,415	\$3,190,999	—\$25,416	—0.79

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$1,031,177	\$1,057,258	+\$26,081	+2.53

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$4,036,599	\$4,218,530	+\$181,931	+4.51

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	3,424	3,894	+470	+13.73
Smallest number, . . . . .	1,914	2,520	+606	+31.66
Greatest number, . . . . .	5,039	5,103	+64	+1.27
Excess of greatest over smallest number, .	3,125	2,583	—542	—17.34

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	3,133	—	3,133	3,304	—	3,304
February, . . . . .	3,215	—	3,215	3,287	—	3,287
March, . . . . .	3,458	—	3,458	3,602	—	3,602
April, . . . . .	4,133	—	4,133	4,028	—	4,028
May, . . . . .	3,152	—	3,152	4,250	—	4,250
June, . . . . .	2,550	—	2,550	4,393	—	4,393
July, . . . . .	2,822	—	2,822	4,153	—	4,153



## STONE — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	3,167	-	3,167	4,045	-	4,045
September, . . . . .	3,466	-	3,466	4,034	-	4,034
October, . . . . .	4,241	-	4,241	3,890	-	3,890
November, . . . . .	4,033	-	4,033	3,581	-	3,581
December, . . . . .	3,567	-	3,567	2,995	-	2,995
During the entire year,* . .	298	-	298	386	-	386

\* 14 establishments in 1892; 13 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,888,009	\$2,097,036	+\$209,027	+11.07
Average yearly earnings, . . . . .	551.40	538.53	-12.87	-2.33

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	84	-	84	80	-	80
\$5 but under \$6, . . . . .	143	-	143	146	-	146
\$6 but under \$7, . . . . .	146	-	146	206	-	206
\$7 but under \$8, . . . . .	157	-	157	177	-	177
\$8 but under \$9, . . . . .	188	-	188	231	-	231
\$9 but under \$10, . . . . .	398	-	398	514	-	514
\$10 but under \$12, . . . . .	1,007	-	1,007	994	-	994
\$12 but under \$15, . . . . .	862	-	862	997	-	997
\$15 but under \$20, . . . . .	1,310	-	1,310	1,450	-	1,450
\$20 and over, . . . . .	271	-	271	306	-	306
TOTALS, . . . . .	4,566	-	4,566	5,101	-	5,101

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	57.08	56.00	-1.08	-1.89
Average number of days in operation, . . .	274.26	283.07	+8.81	+3.21

STRAW AND PALM LEAF GOODS. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	20	20	=	=
Number of private firms, . . . . .	18	18	=	=
Number of partners, . . . . .	40	38	-2	-5.00
Males, . . . . .	39	37	-2	-5.13
Females, . . . . .	1	1	=	=
Number of corporations, . . . . .	2	2	=	=
Number of stockholders, . . . . .	15	16	+1	+6.67
Males, . . . . .	10	10	=	=
Females, . . . . .	5	5	=	=
Banks, trustees, etc., . . . . .	-	1	+1	-
Aggregates : partners and stockholders, .	55	54	-1	-1.82

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$1,848,327	\$2,022,044	+\$173,717	+9.40

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$2,347,222	\$2,381,505	+\$34,283	+1.46

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$4,509,264	\$4,576,766	+\$67,502	+1.50

## STRAW AND PALM LEAF GOODS—1892, 1893—Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	2,373	2,335	-38	-1.60
Smallest number, . . . . .	583	451	-132	-22.64
Greatest number, . . . . .	4,022	4,079	+57	+1.42
Excess of greatest over smallest number, .	3,439	3,628	+189	+5.50

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	1,167	2,086	3,253	1,261	2,355	3,616
February, . . . . .	1,264	2,444	3,708	1,317	2,508	3,915
March, . . . . .	1,268	2,552	3,820	1,321	2,649	3,970
April, . . . . .	1,230	2,442	3,672	1,272	2,578	3,850
May, . . . . .	1,002	2,048	3,050	1,013	2,199	3,212
June, . . . . .	551	908	1,459	616	989	1,605
July, . . . . .	356	409	765	312	341	653
August, . . . . .	523	411	934	446	337	783
September, . . . . .	630	615	1,245	494	424	918
October, . . . . .	787	1,000	1,787	677	773	1,450
November, . . . . .	872	1,220	2,092	815	1,114	1,929
December, . . . . .	956	1,716	2,672	998	1,645	2,643

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,136,069	\$1,143,257	+\$7,188	+0.63
Average yearly earnings, . . . . .	478.75	489.62	+10.87	+2.27

STRAW AND PALM LEAF GOODS — 1892, 1893 — Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	30	219	249	34	165	199
\$5 but under \$6, . . . . .	23	211	234	34	177	211
\$6 but under \$7, . . . . .	49	233	337	47	246	293
\$7 but under \$8, . . . . .	81	233	319	81	208	289
\$8 but under \$9, . . . . .	63	523	591	83	508	591
\$9 but under \$10, . . . . .	249	236	535	223	373	596
\$10 but under \$12, . . . . .	220	311	531	272	323	595
\$12 but under \$15, . . . . .	429	345	774	363	366	729
\$15 but under \$20, . . . . .	147	115	262	180	164	344
\$20 and over, . . . . .	39	23	67	33	18	51
TOTALS, . . . . .	1,330	2,569	3,899	1,350	2,548	3,898

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	75.15	70.30	—4.85	—6.45
Average number of days in operation, . . . . .	267.27	264.26	—3.01	—1.13

TALLOW, CANDLES, SOAP, AND GREASE. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (—), OR NO CHANGE (—), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . . . .	62	62	=	=
Number of private firms, . . . . .	59	58	—1	—1.69
Number of partners, . . . . .	83	81	—2	—2.41
Males, . . . . .	83	80	—3	—3.61
Females, . . . . .	—	1	+1	—
Number of corporations, . . . . .	3	4	+1	+33.33
Number of stockholders, . . . . .	11	18	+7	+63.64
Males, . . . . .	10	11	+1	+10.00
Females, . . . . .	1	7	+6	+600.00
Aggregates : partners and stockholders, . . . . .	94	99	+5	+5.32

**TALLOW, CANDLES, SOAP, AND GREASE — 1892, 1893**  
— Continued.

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$1,689,968	\$1,786,575	+\$96,607	+5.72

**STOCK USED. AGGREGATE VALUES.**

STOCK USED	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$2,354,632	\$2,336,150	—\$18,482	—0.78

**GOODS MADE. AGGREGATE VALUES.**

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$3,432,877	\$3,414,700	—\$18,177	—0.53

**PERSONS EMPLOYED.**

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	708	693	—15	—2.12
Smallest number, . . . . .	617	581	—36	—5.83
Greatest number, . . . . .	790	778	—12	—1.52
Excess of greatest over smallest number, .	173	197	+24	+13.87

**PERSONS EMPLOYED: BY MONTHS.**

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	527	59	586	617	92	709
February, . . . . .	539	69	608	620	92	712
March, . . . . .	555	100	655	604	45	649
April, . . . . .	577	103	680	617	64	681
May, . . . . .	608	122	730	627	93	720
June, . . . . .	614	114	728	629	112	741
July, . . . . .	624	118	742	608	110	718

TALLOW, CANDLES, SOAP, AND GREASE — 1892, 1893  
— Concluded.

PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	623	126	749	586	100	686
September, . . . . .	619	115	734	582	89	671
October, . . . . .	623	98	721	574	89	663
November, . . . . .	636	111	747	586	82	668
December, . . . . .	631	122	753	575	75	650
During the entire year,* . .	94	4	98	89	1	90

\* 26 establishments in 1892; 24 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$330,940	\$337,003	+\$6,063	+1.83
Average yearly earnings, . . . . .	467.43	486.30	+18.87	+4.04

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	23	103	126	15	107	122
\$5 but under \$6, . . . . .	14	12	26	13	5	18
\$6 but under \$7, . . . . .	12	5	17	19	7	26
\$7 but under \$8, . . . . .	52	2	54	26	1	27
\$8 but under \$9, . . . . .	75	2	77	48	-	48
\$9 but under \$10, . . . . .	144	-	144	179	2	181
\$10 but under \$12, . . . . .	152	-	152	188	-	188
\$12 but under \$15, . . . . .	106	1	109	110	1	111
\$15 but under \$20, . . . . .	40	-	40	49	-	49
\$20 and over, . . . . .	14	-	14	15	-	15
TOTALS, . . . . .	634	125	759	662	123	785

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	67.27	61.08	-6.19	-9.20
Average number of days in operation, . .	298.43	287.41	-11.02	-3.69

## TOBACCO, SNUFF, AND CIGARS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	42	42	=	=
Number of private firms, . . . . .	37	37	=	=
Number of partners, . . . . .	56	54	-2	-3.57
Males, . . . . .	53	51	-2	-3.77
Females, . . . . .	1	3	+2	+200.00
Special, . . . . .	1	-	-1	-100.00
Estates, . . . . .	1	-	-1	-100.00
Number of corporations, . . . . .	5	5	=	=
Number of stockholders, . . . . .	43	41	-2	-4.65
Males, . . . . .	40	36	-4	-10.00
Females, . . . . .	3	4	+1	+33.33
Banks, trustees, etc., . . . . .	-	1	+1	-
Aggregates: partners and stockholders, .	99	95	-4	-4.04

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$1,039,294	\$969,233	-\$70,061	-6.74

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$1,541,321	\$1,652,061	+\$110,740	+7.18

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$3,205,552	\$3,204,512	-\$1,040	-0.03

TOBACCO, SNUFF, AND CIGARS — 1892, 1893 — Continued.  
PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	1,784	1,710	—74	—4.15
Smallest number, . . . . .	1,254	1,275	+21	+1.67
Greatest number, . . . . .	2,082	2,118	+36	+1.73
Excess of greatest over smallest number, .	828	843	+15	+1.81

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	958	452	1,410	1,201	544	1,745
February, . . . . .	1,009	471	1,480	1,222	535	1,757
March, . . . . .	1,033	496	1,529	1,233	537	1,770
April, . . . . .	1,086	513	1,599	1,270	560	1,830
May, . . . . .	1,153	562	1,715	1,332	581	1,913
June, . . . . .	1,204	553	1,757	1,378	606	1,984
July, . . . . .	1,275	599	1,874	1,217	529	1,746
August, . . . . .	1,290	609	1,899	1,163	506	1,674
September, . . . . .	1,264	587	1,851	1,121	464	1,585
October, . . . . .	1,255	581	1,836	1,116	468	1,584
November, . . . . .	1,189	562	1,751	1,059	430	1,489
December, . . . . .	1,173	525	1,698	995	432	1,427
During the entire year,* . .	34	13	47	13	1	14

\* 5 establishments in 1892; 4 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,026,942	\$1,067,974	+\$41,032	+4.00
Average yearly earnings, . . . . .	575.64	624.55	+48.91	+8.50



## TOBACCO, SNUFF, AND CIGARS — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	51	167	218	45	184	229
\$5 but under \$6, . . . . .	33	112	145	13	127	140
\$6 but under \$7, . . . . .	29	156	185	20	156	176
\$7 but under \$8, . . . . .	28	86	114	16	81	97
\$8 but under \$9, . . . . .	26	24	50	32	27	59
\$9 but under \$10, . . . . .	53	20	73	49	18	67
\$10 but under \$12, . . . . .	182	52	184	117	17	134
\$12 but under \$15, . . . . .	282	30	312	289	47	336
\$15 but under \$20, . . . . .	486	10	496	529	15	544
\$20 and over, . . . . .	340	3	343	332	4	336
TOTALS, . . . . .	1,460	660	2,120	1,442	675	2,117

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	69.21	61.14	-8.07	-11.66
Average number of days in operation, . . .	297.41	290.41	-7.00	-2.35

## TOYS AND GAMES (CHILDREN'S). 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	8	8	=	=
Number of private firms, . . . . .	5	5	=	=
Number of partners, . . . . .	10	10	=	=
Males, . . . . .	8	8	=	=
Females, . . . . .	2	2	=	=
Number of corporations, . . . . .	3	3	=	=
Number of stockholders, . . . . .	21	18	-3	-14.29
Males, . . . . .	21	18	-3	-14.29
Aggregates: partners and stockholders, . .	31	28	-3	-9.68

## TOYS AND GAMES (CHILDREN'S) — 1892, 1893 — Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$344,000	\$330,000	—\$14,000	—4.07

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$237,243	\$217,847	—\$19,396	—8.18

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$632,682	\$586,730	—\$45,952	—7.26

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	524	495	—29	—5.53
Smallest number, . . . . .	346	301	—45	—13.01
Greatest number, . . . . .	633	641	—42	—6.15
Excess of greatest over smallest number, .	337	340	+3	+0.89

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	325	54	379	325	48	373
February, . . . . .	371	71	442	351	59	410
March, . . . . .	409	85	494	388	78	466
April, . . . . .	413	93	506	394	96	490
May, . . . . .	446	95	541	405	110	515
June, . . . . .	450	97	547	419	118	537
July, . . . . .	442	109	551	417	115	532

## TOYS AND GAMES (CHILDREN'S) — 1892, 1893 — Concluded.

## PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	457	111	568	402	89	491
September, . . . . .	487	117	604	429	98	527
October, . . . . .	496	129	625	463	108	571
November, . . . . .	497	135	632	448	114	562
December, . . . . .	427	100	527	374	95	469

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$221,554	\$196,511	—\$25,043	—11.30
Average yearly earnings, . . . . .	422.81	396.99	—25.82	—6.11

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	75	51	126	72	28	100
\$5 but under \$6, . . . . .	47	25	72	38	28	66
\$6 but under \$7, . . . . .	49	33	82	50	35	85
\$7 but under \$8, . . . . .	77	17	94	73	12	85
\$8 but under \$9, . . . . .	42	9	51	43	6	49
\$9 but under \$10, . . . . .	80	5	85	72	7	79
\$10 but under \$12, . . . . .	62	2	64	48	4	52
\$12 but under \$15, . . . . .	53	1	54	55	3	58
\$15 but under \$20, . . . . .	32	—	32	26	—	26
\$20 and over, . . . . .	18	—	18	16	—	16
TOTALS, . . . . .	535	143	678	493	123	616

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	80.13	71.88	—8.25	—10.30
Average number of days in operation, . . . . .	297.46	282.94	—14.52	—4.88

## TRUNKS AND VALISES. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	7	7	=	=
Number of private firms, . . . . .	7	7	=	=
Number of partners, . . . . .	11	11	=	=
Males, . . . . .	11	11	=	=

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$35,900	\$31,200	-\$4,700	-5.47

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$158,204	\$126,836	-\$31,368	-19.83

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$295,119	\$240,018	-\$55,101	-18.67

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	114	99	-15	-13.16
Smallest number, . . . . .	73	55	-18	-24.66
Greatest number, . . . . .	135	121	-14	-10.37
Excess of greatest over smallest number, .	62	66	+4	+6.45

## TRUNKS AND VALISES — 1892, 1893 — Continued.

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	75	2	77	86	5	91
February, . . . . .	101	9	110	104	10	114
March, . . . . .	108	10	118	104	11	115
April, . . . . .	109	10	119	106	11	117
May, . . . . .	110	12	122	110	11	121
June, . . . . .	119	13	132	102	10	112
July, . . . . .	117	12	129	99	8	107
August, . . . . .	117	11	128	92	7	99
September, . . . . .	112	11	123	79	10	89
October, . . . . .	101	10	111	71	8	79
November, . . . . .	103	9	112	78	8	86
December, . . . . .	88	5	93	64	3	67
During the entire year,* . . . . .	80	—	80	13	—	13

\* 4 establishments in 1892; 2 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$67,766	\$54,406	—\$13,360	—19.71
Average yearly earnings, . . . . .	594.44	549.56	—44.88	—7.55

## CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	6	4	10	9	3	12
\$5 but under \$6, . . . . .	3	5	8	4	4	8
\$6 but under \$7, . . . . .	5	4	9	5	4	9
\$7 but under \$8, . . . . .	2	—	2	14	—	14
\$8 but under \$9, . . . . .	4	—	4	5	—	5
\$9 but under \$10, . . . . .	7	—	7	7	—	7
\$10 but under \$12, . . . . .	13	—	13	12	—	12
\$12 but under \$15, . . . . .	35	—	35	25	—	25
\$15 but under \$20, . . . . .	43	—	43	28	—	28
\$20 and over, . . . . .	6	—	6	5	—	5
TOTALS, . . . . .	124	13	137	114	11	125

## TRUNKS AND VALISES — 1892, 1893 — Concluded.

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	84.29	76.29	-9.00	-10.68
Average number of days in operation, . . .	306.00	279.56	-26.44	-8.64

## WHIPS, LASHES, AND STOCKS. 1892, 1893.

## ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	10	10	=	=
Number of private firms, . . . . .	7	7	=	=
Number of partners, . . . . .	14	14	=	=
Males, . . . . .	14	14	=	=
Number of corporations, . . . . .	3	3	=	=
Number of stockholders, . . . . .	140	204	+64	+45.71
Males, . . . . .	100	133	+33	+33.00
Females, . . . . .	33	54	+21	+63.64
Banks, trustees, etc., . . . . .	7	17	+10	+142.86
Aggregates: partners and stockholders, .	154	218	+64	+41.56

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$713,004	\$857,000	+\$143,996	+20.09

## STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$426,171	\$384,758	-\$41,413	-9.72

## WHIPS, LASHES, AND STOCKS — 1892, 1893 — Continued.

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$1,078,496	\$957,538	—\$90,958	—8.37

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	436	326	—111	—25.46
Smallest number, . . . . .	406	106	—300	—73.89
Greatest number, . . . . .	461	466	+5	+1.08
Excess of greatest over smallest number, .	55	360	+305	+554.55

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	287	140	427	272	144	416
February, . . . . .	289	144	433	281	154	435
March, . . . . .	304	142	446	277	152	429
April, . . . . .	302	140	442	295	166	461
May, . . . . .	292	144	436	289	158	447
June, . . . . .	295	142	437	243	130	373
July, . . . . .	290	140	430	238	124	362
August, . . . . .	288	146	434	193	95	288
September, . . . . .	297	147	444	89	30	119
October, . . . . .	297	145	442	130	66	196
November, . . . . .	295	144	439	139	71	210
December, . . . . .	290	141	431	131	59	190
During the entire year,* . .	32	17	49	4	2	6

\* 3 establishments in 1892; 1 establishment in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$201,042	\$154,904	—\$46,138	—22.95
Average yearly earnings, . . . . .	461.11	476.63	+15.52	+3.37

WHIPS, LASHES, AND STOCKS — 1892, 1893 — Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	30	24	53	31	30	61
\$5 but under \$6, . . . . .	17	24	41	17	45	62
\$6 but under \$7, . . . . .	16	49	65	17	51	68
\$7 but under \$8, . . . . .	16	25	41	24	23	46
\$8 but under \$9, . . . . .	18	8	26	23	12	40
\$9 but under \$10, . . . . .	40	9	49	36	11	47
\$10 but under \$12, . . . . .	33	5	43	52	1	53
\$12 but under \$15, . . . . .	71	-	71	51	-	51
\$15 but under \$20, . . . . .	43	-	43	24	-	24
\$20 and over, . . . . .	13	-	13	14	-	14
TOTALS, . . . . .	311	144	455	294	172	466

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	67.90	68.80	-4.10	-6.04
Average number of days in operation, . . .	300.58	245.79	-54.79	-18.23

WOODEN GOODS. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	168	168	=	=
Number of private firms, . . . . .	154	151	-3	-1.95
Number of partners, . . . . .	213	214	+1	+0.47
Males, . . . . .	207	204	-3	-1.45
Females, . . . . .	6	9	+3	+50.00
Estates, . . . . .	-	1	+1	-
Number of corporations, . . . . .	14	17	+3	+21.43
Number of stockholders, . . . . .	190	199	+9	+4.74
Males, . . . . .	155	160	+5	+3.23
Females, . . . . .	24	24	=	=
Banks, trustees, etc., . . . . .	11	15	+4	+36.36
Aggregates: partners and stockholders, .	403	413	+10	+2.48



## WOODEN GOODS — 1892, 1893 — Continued.

## CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . .	\$3,217,225	\$3,471,774	+\$254,549	+7.91

## STOCK USED. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . .	\$2,826,120	\$2,649,297	-\$176,823	-6.25

## GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$5,643,281	\$5,442,780	-\$200,501	-3.55

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Number	Percent- ages
Average number, . . . . .	3,199	3,062	-147	-4.60
Smallest number, . . . . .	2,521	2,326	-195	-7.74
Greatest number, . . . . .	3,926	3,838	-88	-2.24
Excess of greatest over smallest number, .	1,405	1,512	+107	+7.62

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	2,965	49	3,014	3,040	66	3,106
February, . . . . .	2,917	55	2,972	3,073	76	3,149
March, . . . . .	2,890	59	2,949	3,089	82	3,171
April, . . . . .	2,863	68	2,931	3,105	89	3,194
May, . . . . .	2,885	67	2,952	3,254	85	3,339
June, . . . . .	3,035	64	3,099	3,243	85	3,328
July, . . . . .	3,160	77	3,237	3,084	91	3,175

WOODEN GOODS — 1892, 1893 — Concluded.  
PERSONS EMPLOYED: BY MONTHS — Concluded.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	3,259	77	3,336	2,855	67	2,922
September, . . . . .	3,324	71	3,395	2,817	70	2,887
October, . . . . .	3,447	82	3,529	2,723	76	2,799
November, . . . . .	3,403	90	3,493	2,760	84	2,844
December, . . . . .	3,313	81	3,394	2,654	79	2,733
During the entire year,* . . . . .	387	-	387	164	-	164

\* 42 establishments in 1892; 24 establishments in 1893.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$1,712,341	\$1,636,757	-\$75,584	-4.41
Average yearly earnings, . . . . .	535.27	536.29	+1.02	+0.19

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	126	41	167	106	35	141
\$5 but under \$6, . . . . .	62	16	78	80	19	99
\$6 but under \$7, . . . . .	118	13	131	137	17	154
\$7 but under \$8, . . . . .	232	3	235	246	5	251
\$8 but under \$9, . . . . .	261	4	265	260	5	265
\$9 but under \$10, . . . . .	645	2	647	682	6	688
\$10 but under \$12, . . . . .	495	5	500	479	5	484
\$12 but under \$15, . . . . .	751	2	753	665	2	667
\$15 but under \$20, . . . . .	925	5	930	791	5	796
\$20 and over, . . . . .	173	3	176	144	3	147
TOTALS, . . . . .	3,738	94	3,832	3,590	102	3,692

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . . . .	64.80	57.86	-6.94	-10.71
Average number of days in operation, . . . . .	295.12	281.04	-14.08	-4.77

**WOOLLEN GOODS. 1892, 1893.**  
**ESTABLISHMENTS, PARTNERS, ETC.**

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	125	125	=	=
Number of private firms, . . . . .	88	87	-1	-1.14
Number of partners, . . . . .	147	143	-4	-2.72
Males, . . . . .	130	125	-4	-2.98
Females, . . . . .	5	4	-1	-20.00
Special, . . . . .	1	1	=	=
Estates, . . . . .	2	3	+1	+50.00
Number of corporations, . . . . .	37	38	+1	+2.70
Number of stockholders, . . . . .	1,063	1,091	+28	+2.63
Males, . . . . .	564	581	+17	+3.01
Females, . . . . .	337	351	+14	+4.15
Banks, trustees, etc., . . . . .	162	159	-3	-1.85
Aggregates: partners and stockholders, .	1,310	1,234	+24	+1.96

**CAPITAL INVESTED.**

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$27,220,349	\$25,554,830	-\$1,665,469	-6.12

**STOCK USED. AGGREGATE VALUES.**

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$20,360,682	\$16,674,542	-\$3,686,140	-18.10
Clips, . . . . .	340,575	205,049	-135,526	-39.79
Cotton, raw . . . . .	279,536	253,387	-26,149	-9.35
Flocks, . . . . .	16,882	16,559	-323	-1.91
Nolls, . . . . .	173,925	124,578	-49,347	-28.37
Rags, woollen . . . . .	702,727	599,097	-103,630	-14.73
Shoddy, . . . . .	728,467	507,490	-220,977	-30.33
Warp, cotton . . . . .	317,866	250,066	-67,800	-21.33
Waste, cotton . . . . .	83,477	31,334	-52,143	-62.48
Waste, woollen . . . . .	250,592	223,546	-27,046	-10.79
Wool, scoured . . . . .	2,759,471	2,179,241	-580,230	-21.03
Wool, unscoured . . . . .	2,052,128	1,585,490	-466,638	-22.74
Wool (not specified), . . . . .	6,675,399	5,411,099	-1,264,300	-18.94
Yarn, cotton . . . . .	60,330	45,904	-14,426	-23.91
Yarn, worsted . . . . .	299,135	420,054	+120,919	+40.42
Not classified in detail, . . . . .	5,670,172	4,812,628	-857,544	-15.12

**WOOLLEN GOODS — 1892, 1893 — Continued.**  
**STOCK USED. AGGREGATE QUANTITIES.**

CLASSIFICATION.	Basis of Measurement	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Quantities	Percentages
Clips, . . . . .	100 pounds	32,908	20,302	—12,606	—38.31
Cotton, raw . . . . .	100 pounds	23,891	22,429	—1,462	—6.12
Flocks, . . . . .	100 pounds	3,206	3,084	—122	—3.81
Noils, . . . . .	100 pounds	6,134	3,601	—1,533	—29.86
Rags, woollen . . . . .	100 pounds	103,401	93,085	—10,316	—9.98
Shoddy, . . . . .	100 pounds	61,622	48,042	—13,580	—22.04
Warp, cotton . . . . .	100 yards	122,430	100,512	—21,918	—17.90
Warp, cotton . . . . .	100 pounds	3,373	2,680	—1,193	—30.89
Waste, cotton . . . . .	100 pounds	6,166	6,370	+205	+3.97
Waste, woollen . . . . .	100 pounds	18,492	18,319	—173	—0.94
Wool, scoured . . . . .	100 pounds	54,019	48,450	—6,569	—10.31
Wool, unscoured . . . . .	100 pounds	82,340	67,240	—15,100	—18.34
Wool (not specified), . . . . .	100 pounds	237,900	206,339	—31,561	—13.27
Yarn, cotton . . . . .	100 pounds	2,273	1,987	—291	—12.77
Yarn, worsted . . . . .	100 pounds	2,620	4,229	+1,609	+61.41

**STOCK USED. AVERAGE VALUES.**

CLASSIFICATION.	Basis of Measurement	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Amounts	Percentages
Clips, . . . . .	100 pounds	\$10.34	\$10.10	—\$0.25	—2.42
Cotton, raw . . . . .	100 pounds	11.70	11.30	—0.40	—3.42
Flocks, . . . . .	100 pounds	5.27	5.37	+0.10	+1.90
Noils, . . . . .	100 pounds	33.88	34.60	+0.72	+2.13
Rags, woollen . . . . .	100 pounds	6.80	6.44	—0.36	—5.29
Shoddy, . . . . .	100 pounds	11.82	10.56	—1.26	—10.66
Warp, cotton . . . . .	100 yards	1.97	2.08	+0.11	+5.58
Warp, cotton . . . . .	100 pounds	19.65	18.71	—0.94	—4.78
Waste, cotton . . . . .	100 pounds	6.48	5.84	—0.64	—9.88
Waste, woollen . . . . .	100 pounds	13.55	12.20	—1.35	—9.96
Wool, scoured . . . . .	100 pounds	51.08	44.98	—6.10	—11.94
Wool, unscoured . . . . .	100 pounds	24.92	23.58	—1.34	—5.38
Wool (not specified), . . . . .	100 pounds	28.06	26.22	—1.84	—6.56
Yarn, cotton . . . . .	100 pounds	26.48	23.10	—3.38	—12.76
Yarn, worsted . . . . .	100 pounds	114.17	99.33	—14.84	—13.00

## WOOLLEN GOODS — 1892, 1893 — Continued.

## GOODS MADE. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$34,074,848	\$28,061,654	—\$6,013,194	—17.65
Cassimeres, . . . . .	5,202,099	4,366,089	—836,010	—16.07
Cheviots, . . . . .	241,870	178,185	—63,685	—26.40
Cloakings, . . . . .	1,576,528	1,589,054	+12,526	+0.79
Cloth, woollen . . . . .	1,073,516	854,582	—218,934	—20.39
Dress goods, flannel . . . . .	1,208,009	980,290	—227,719	—18.85
Dress goods, woollen . . . . .	2,809,135	1,738,038	—1,071,097	—38.13
Dress goods, worsted . . . . .	110,000	157,300	+47,300	+43.00
Flannel, . . . . .	2,282,829	1,961,199	—321,630	—14.09
Kerseys, . . . . .	226,952	203,831	—23,121	—10.21
Meltons, . . . . .	360,115	269,793	—90,322	—25.08
Overcoating, . . . . .	478,931	466,924	—12,007	—2.51
Satinet, . . . . .	3,638,396	2,438,933	—1,199,463	—32.97
Shoddy, . . . . .	550,785	340,556	—210,227	—38.17
Suitings, men's . . . . .	1,005,547	808,259	—197,288	—19.62
Yarn, woollen . . . . .	147,816	120,294	—27,522	—18.64
Not classified in detail, . . . . .	18,602,825	11,648,825	—6,954,000	—37.40

## GOODS MADE. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Quantities	Percent- ages
Cassimeres, . . . . .	100 yards	44,449	42,384	—2,065	—4.65
Cheviots, . . . . .	100 yards	1,867	1,463	—404	—21.64
Cloakings, . . . . .	yards	1,251,943	1,335,679	+133,736	+10.68
Cloth, woollen . . . . .	yards	706,674	515,525	—191,149	—27.05
Dress goods, flannel . . . . .	100 pounds	10,075	8,217	—1,858	—18.44
Dress goods, woollen . . . . .	100 yards	46,852	41,206	—5,646	—12.06
Dress goods, worsted . . . . .	100 yards	1,500	2,420	+920	+61.33
Flannel, . . . . .	100 yards	97,320	90,164	—7,156	—7.35
Kerseys, . . . . .	yards	159,597	142,577	—17,020	—10.66
Meltons, . . . . .	yards	278,077	217,862	—60,215	—21.65
Overcoating, . . . . .	yards	245,000	233,910	—11,090	—4.53
Satinet, . . . . .	100 yards	172,333	128,653	—43,680	—25.35
Shoddy, . . . . .	100 pounds	31,589	21,705	—9,884	—31.29
Suitings, men's . . . . .	yards	747,204	638,522	—108,682	—14.55
Yarn, woollen . . . . .	100 pounds	3,381	3,452	+71	+2.10

WOOLLEN GOODS — 1892, 1893 — Continued.

GOODS MADE. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measurement	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Amounts	Percentages
Casimeres, . . . . .	100 yards	\$117.04	\$103.01	—\$14.03	—11.99
Cheviots, . . . . .	100 yards	129.55	118.33	—11.17	—8.62
Cloakings, . . . . .	yards	1.26	1.15	—0.11	—8.73
Cloth, woollen . . . . .	yards	1.52	1.66	+0.14	+9.21
Dress goods, flannel . . . . .	100 pounds	119.90	113.22	—6.68	—5.57
Dress goods, woollen . . . . .	100 yards	49.29	42.06	—7.23	—14.67
Dress goods, worsted . . . . .	100 yards	73.33	65.00	—8.33	—11.36
Flannel, . . . . .	100 yards	23.46	21.75	—1.71	—7.29
Kerseys, . . . . .	yards	1.42	1.43	+0.01	+0.70
Meltons, . . . . .	yards	1.30	1.24	—0.06	—4.62
Overcoating, . . . . .	yards	1.95	2.00	+0.05	+2.56
Satinet, . . . . .	100 yards	21.11	18.96	—2.15	—10.18
Shoddy, . . . . .	100 pounds	17.44	15.69	—1.75	—10.03
Suitings, men's . . . . .	yards	1.35	1.27	—0.08	—5.93
Yarn, woollen . . . . .	100 pounds	43.57	34.85	—8.72	—20.01

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percentages
Average number, . . . . .	17,100	15,357	—1,743	—7.27
Smallest number, . . . . .	15,204	11,240	—3,964	—26.07
Greatest number, . . . . .	18,313	18,581	+268	+1.46
Excess of greatest over smallest number, .	3,109	7,341	+4,232	+136.12

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	10,617	6,357	16,974	10,938	6,329	17,267
February, . . . . .	10,735	6,364	17,099	11,206	6,569	17,775
March, . . . . .	10,883	6,443	17,331	11,286	6,612	17,898
April, . . . . .	10,957	6,447	17,404	11,269	6,598	17,867
May, . . . . .	10,952	6,417	17,369	11,267	6,566	17,833
June, . . . . .	10,880	6,410	17,290	10,955	6,325	17,280
July, . . . . .	10,539	5,820	16,359	10,033	5,830	15,863

**WOOLLEN GOODS — 1892, 1893 — Concluded.**  
**PERSONS EMPLOYED: BY MONTHS — Concluded.**

Months.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
August, . . . . .	10,676	5,821	16,497	8,810	5,109	13,919
September, . . . . .	10,930	6,459	17,389	8,052	4,321	12,373
October, . . . . .	10,999	6,519	17,509	8,705	4,929	13,634
November, . . . . .	10,981	6,542	17,523	8,914	4,661	13,575
December, . . . . .	10,754	6,471	17,225	9,280	5,406	14,686
During the entire year,* . .	1,154	790	1,944	634	348	982

\* 23 establishments in 1892; 10 establishments in 1893.

**WAGES AND EARNINGS.**

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$6,661,065	\$5,883,015	—\$778,070	—11.68
Average yearly earnings, . . . . .	389.54	371.00	—18.54	—4.76

**CLASSIFIED WEEKLY WAGES.**

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	1,022	1,706	2,728	1,037	1,740	2,777
\$5 but under \$6, . . . . .	703	878	1,576	768	914	1,682
\$6 but under \$7, . . . . .	1,495	1,243	2,748	1,455	1,152	2,607
\$7 but under \$8, . . . . .	2,194	1,490	3,684	2,112	1,290	3,402
\$8 but under \$9, . . . . .	1,287	642	1,929	1,563	843	2,406
\$9 but under \$10, . . . . .	1,571	454	2,025	1,545	405	1,950
\$10 but under \$12, . . . . .	1,497	335	1,832	1,447	304	1,751
\$12 but under \$15, . . . . .	949	66	1,015	910	63	973
\$15 but under \$20, . . . . .	469	—	469	453	1	454
\$20 and over, . . . . .	218	—	218	205	—	205
TOTALS, . . . . .	11,405	6,819	18,224	11,495	6,712	18,207

**PROPORTION OF BUSINESS DONE.**

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . .	87.46	74.03	—13.43	—15.36
Average number of days in operation, . .	299.29	262.37	—36.92	—12.34

WORSTED GOODS. 1892, 1893.  
ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (-), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	20	20	=	=
Number of private firms, . . . . .	10	9	-1	-10.00
Number of partners, . . . . .	17	21	+4	+23.53
Males, . . . . .	17	18	+1	+5.88
Females, . . . . .	-	1	+1	-
Special, . . . . .	-	2	+2	-
Number of corporations, . . . . .	10	11	+1	+10.00
Number of stockholders, . . . . .	465	474	+9	+1.94
Males, . . . . .	298	308	+5	+1.68
Females, . . . . .	122	125	+3	+2.46
Banks, trustees, etc., . . . . .	45	46	+1	+2.22
Aggregates: partners and stockholders, .	492	495	+3	+2.70

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$12,132,889	\$11,038,952	-\$1,093,937	-9.02

STOCK USED. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$12,239,108	\$9,948,697	-\$2,290,411	-18.71
Camel's-hair, . . . . .	280,610	232,492	-48,118	-17.15
Warp, cotton . . . . .	304,398	258,174	-46,224	-15.19
Wool (not specified), . . . . .	6,610,679	5,251,612	-1,359,067	-20.56
Yarn, worsted . . . . .	1,169,079	457,977	-711,102	-60.83
Not classified in detail, . . . . .	3,874,842	3,748,442	-126,900	-3.25

STOCK USED. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measure- ment	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Quantities	Percent- ages
Camel's-hair, . . . . .	100 pounds	22,077	19,066	-3,011	-13.64
Warp, cotton . . . . .	100 pounds	9,334	8,218	-1,116	-11.96
Wool (not specified), . . . . .	100 pounds	239,596	213,086	-26,560	-26.44
Yarn, worsted . . . . .	100 pounds	11,659	5,181	-6,478	-45.56



## WORSTED GOODS — 1892, 1893 — Continued.

## STOCK USED. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measurement	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Amounts	Percentages
Camel's-hair, . . . .	100 pounds	\$12.71	\$12.19	—\$0.52	—4.00
Warp, cotton . . . .	100 pounds	32.61	31.42	—1.19	—3.65
Wool (not specified), . . .	100 pounds	22.83	24.65	+1.82	+7.97
Yarn, worsted . . . .	100 pounds	100.27	88.40	—11.87	—11.84

## GOODS MADE. AGGREGATE VALUES.

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percentages
Total value of goods made and work done, .	\$17,328,002	\$15,523,227	—\$1,799,835	—10.39
Dress goods (not specified), . . . .	3,650,045	2,898,497	—760,548	—20.79
Noils, . . . . .	248,466	177,909	—70,557	—28.40
Suitings, . . . . .	2,474,459	1,678,828	—796,131	—32.17
Yarn, carpet . . . . .	1,185,104	1,152,902	—32,202	—2.72
Yarn, worsted . . . . .	2,967,227	2,733,444	—223,783	—7.57
Not classified in detail, . . . . .	6,803,761	6,887,147	+83,386	+1.23

## GOODS MADE. AGGREGATE QUANTITIES.

CLASSIFICATION.	Basis of Measurement	AGGREGATE QUANTITIES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Quantities	Percentages
Dress goods (not specified), .	100 yards	143,419	118,610	—29,809	—20.68
Noils, . . . . .	100 pounds	13,043	9,120	—3,923	—30.06
Suitings, . . . . .	yards	1,925,863	1,494,737	—441,126	—22.91
Yarn, carpet . . . . .	100 pounds	29,336	27,297	—2,039	—6.96
Yarn, worsted . . . . .	100 pounds	47,681	50,009	+2,328	+4.88

## GOODS MADE. AVERAGE VALUES.

CLASSIFICATION.	Basis of Measurement	AVERAGE VALUES PER BASIS		INCREASE (+), OR DECREASE (—), IN 1893	
		1892	1893	Amounts	Percentages
Dress goods (not specified), .	100 yards	\$24.65	\$24.44	—\$0.21	—0.85
Noils, . . . . .	100 pounds	19.05	19.51	+0.46	+2.41
Suitings, . . . . .	yards	1.28	1.13	—0.15	—11.72
Yarn, carpet . . . . .	100 pounds	40.40	42.24	+1.84	+4.55
Yarn, worsted . . . . .	100 pounds	62.02	54.66	—7.36	—11.87

WORSTED GOODS — 1892, 1893 — Continued.

PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	8,996	9,025	+29	+0.32
Smallest number, . . . . .	8,117	6,791	—1,326	—16.34
Greatest number, . . . . .	9,813	10,270	+457	+4.66
Excess of greatest over smallest number, .	1,696	3,479	+1,783	+106.13

PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	4,270	4,300	8,570	5,043	4,622	9,665
February, . . . . .	4,239	4,339	8,578	5,080	4,647	9,727
March, . . . . .	4,336	4,386	8,722	5,194	4,706	9,899
April, . . . . .	4,376	4,339	8,715	5,249	4,683	9,932
May, . . . . .	4,415	4,329	8,744	5,266	4,696	9,962
June, . . . . .	4,441	4,450	8,891	5,146	4,661	9,807
July, . . . . .	4,537	4,473	9,010	5,039	4,531	9,570
August, . . . . .	4,585	4,663	9,248	3,876	3,726	7,602
September, . . . . .	4,604	4,657	9,261	3,701	3,447	7,148
October, . . . . .	4,629	4,697	9,326	4,279	3,908	8,187
November, . . . . .	4,696	4,719	9,415	4,241	3,852	8,093
December, . . . . .	4,711	4,740	9,451	4,590	4,120	8,710

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$3,321,837	\$2,202,796	—\$1,119,041	—33.69
Average yearly earnings, . . . . .	369.26	244.08	—125.18	—33.90

CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	418	1,008	1,426	544	1,174	1,718
\$5 but under \$6, . . . . .	480	1,247	1,727	361	1,217	1,578
\$6 but under \$7, . . . . .	515	1,242	1,757	542	1,488	2,030
\$7 but under \$8, . . . . .	952	601	1,553	1,099	545	1,644
\$8 but under \$9, . . . . .	418	340	758	535	285	820
\$9 but under \$10, . . . . .	531	159	690	577	145	722

## WORSTED GOODS — 1892, 1893 — Concluded.

## CLASSIFIED WEEKLY WAGES — Concluded.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
\$10 but under \$12, . . . .	581	187	768	666	150	815
\$12 but under \$15, . . . .	730	17	747	711	4	715
\$15 but under \$20, . . . .	186	-	186	197	8	205
\$20 and over, . . . .	81	-	81	73	-	73
TOTALS, . . . .	4,892	4,801	9,693	5,305	5,025	10,330

## PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), or DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	90.15	77.40	-12.75	-14.14
Average number of days in operation, . . .	303.61	277.96	-25.65	-8.45

ALL INDUSTRIES. 1892, 1893.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.	1892	1893	INCREASE (+), DE- CREASE (−), OR NO CHANGE (=), IN 1893	
			Number	Percent- ages
Number of establishments reporting, . . .	*4,397	*4,397	=	=
Number of private firms, . . . . .	3,534	3,478	−56	−1.58
Number of partners, . . . . .	5,671	5,519	−152	−2.68
Males, . . . . .	5,477	5,292	−185	−3.38
Females, . . . . .	123	129	+6	+4.88
Special, . . . . .	59	59	=	=
Estates, . . . . .	12	39	+27	+225.00
Number of corporations, . . . . .	820	872	+52	+6.34
Number of stockholders, . . . . .	37,064	38,284	+1,220	+3.29
Males, . . . . .	21,848	21,919	+71	+0.32
Females, . . . . .	11,658	12,301	+643	+5.56
Banks, trustees, etc., . . . . .	3,551	4,051	+500	+14.08
Syndicates, . . . . .	8	9	+1	+12.50
Railroads, . . . . .	4	4	=	=
Aggregates : partners and stockholders, .	42,735	43,803	+1,068	+2.50

\* See head-notes to presentations on pages 4, 5, 8, and 9.

CAPITAL INVESTED.

CAPITAL INVESTED.	1892	1893	INCREASE (+), OR DECREASE (−), IN 1893	
			Amounts	Percent- ages
Amount of capital invested, . . . . .	\$439,015,263	\$444,480,277	+\$5,465,014	+1.24

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1892	1893	INCREASE (+), OR DECREASE (−), IN 1893	
			Amounts	Percent- ages
Total value of stock used, . . . . .	\$376,554,375	\$348,991,905	−\$27,562,470	−7.32

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1892	1893	INCREASE (+), OR DECREASE (−), IN 1893	
			Amounts	Percent- ages
Total value of goods made and work done, .	\$639,137,402	\$587,343,550	−\$51,793,852	−8.10

## ALL INDUSTRIES — 1892, 1893 — Continued.

## PERSONS EMPLOYED.

PERSONS EMPLOYED.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Number	Percent- ages
Average number, . . . . .	306,203	293,169	—13,034	—4.26
Smallest number, . . . . .	267,168	222,370	—44,798	—16.77
Greatest number, . . . . .	344,004	345,333	+1,334	+0.40
Excess of greatest over smallest number, .	76,836	123,013	+46,182	+60.10

## PERSONS EMPLOYED: BY MONTHS.

MONTHS.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
January, . . . . .	196,044	101,151	297,195	206,447	106,023	312,470
February, . . . . .	198,735	103,044	301,779	207,305	106,139	313,444
March, . . . . .	200,595	104,000	304,595	210,370	106,549	316,919
April, . . . . .	203,123	104,753	307,881	211,337	108,431	319,813
May, . . . . .	203,496	104,125	307,621	210,971	107,657	318,633
June, . . . . .	202,911	102,700	305,611	206,218	104,267	310,485
July, . . . . .	201,708	100,450	302,158	195,172	98,031	293,203
August, . . . . .	203,672	99,975	303,647	178,040	85,834	263,874
September, . . . . .	205,566	102,521	308,087	167,940	80,464	248,404
October, . . . . .	206,161	104,652	310,813	178,281	92,691	270,972
November, . . . . .	206,342	104,695	311,037	177,963	93,441	271,409
December, . . . . .	206,503	104,800	310,303	178,095	94,466	272,561
During the entire year,* . . .	28,256	15,812	44,068	15,746	8,243	23,989

\* 1,087 establishments in 1892; 702 establishments in 1893.

## WAGES AND EARNINGS.

WAGES AND EARNINGS.	1892	1893	INCREASE (+), OR DECREASE (—), IN 1893	
			Amounts	Percent- ages
Total amount paid in wages, . . . . .	\$127,972,501	\$127,236,397	—\$736,104	—0.57
Average yearly earnings, . . . . .	450.59	434.17	—16.42	—3.64

ALL INDUSTRIES — 1892, 1893 — Concluded.  
CLASSIFIED WEEKLY WAGES.

CLASSIFICATION OF WEEKLY WAGE.	1892			1893		
	Males	Females	Totals	Males	Females	Totals
Under \$5, . . . . .	16,929	28,219	45,148	16,840	27,791	44,631
\$5 but under \$6, . . . .	10,506	20,266	30,772	10,794	19,910	30,704
\$6 but under \$7, . . . .	17,200	20,972	38,172	16,918	21,578	38,496
\$7 but under \$8, . . . .	19,594	15,606	35,200	19,906	15,242	35,148
\$8 but under \$9, . . . .	17,704	10,061	27,765	19,118	11,058	30,176
\$9 but under \$10, . . . .	28,942	7,811	36,253	29,172	7,535	36,707
\$10 but under \$12, . . . .	33,290	5,844	39,134	33,417	5,913	39,335
\$12 but under \$15, . . . .	39,573	2,649	42,222	38,620	2,712	41,332
\$15 but under \$20, . . . .	30,770	985	31,755	30,337	927	31,264
\$20 and over, . . . . .	10,838	121	10,459	10,141	103	10,244
TOTALS, . . . . .	224,846	112,034	336,880	225,263	112,774	338,037

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Proportion and Days	Percent- ages
Average proportion of business done, . . .	69.38	59.18	-10.20	-14.70
Average number of days in operation, . . .	297.83	277.36	-20.47	-6.87



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# ANALYSIS.

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## ANALYSIS.

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The statistical tables contained in this volume are based upon returns from 4,397 identical establishments, in 75 classified industries, which made reports for each of the years 1892 and 1893. The comparisons may be relied upon as accurately reflecting industrial conditions prevailing in the Commonwealth during the two years.

It is necessary to repeat that this report *does not* present numerical aggregates of all goods made and work done in the manufacturing and mechanical establishments of Massachusetts in the two years considered, but it furnishes a basis for comparing one year's condition with another year's condition, and, in connection with other similar reports, it will be found to supply results comparable with the results obtained in the Decennial Census.

Wherever "All Industries" are referred to in this volume, it is to be understood that the 75 classified industries mentioned in the first table (pages 4 to 7) are meant; and wherever numerical aggregates are presented for All Industries or for any single industry, whether of capital invested, stock used, goods made, persons employed, or wages paid, only such aggregates are intended as are derived from the 4,397 establishments each of which made return for each of the years 1892 and 1893, and for which it is possible to make comparisons, unless some other meaning is distinctly stated in the text.

The plan adopted in the report for 1892 has been followed in the present volume; that is, pages 1 to 60 includes general statistics by industries, arranged under the following subject or division heads: Private Firms and Corporations and Partners and Stockholders, Capital Invested, Stock Used, Goods Made, Persons Employed, Wages Paid, and Proportion of Business Done. The second section, pages 61 to 274, is devoted to industry presentations in detail, all of the facts relating to each industry being grouped under its respective title.

This arrangement promotes the convenience of those who consult the report and enhances its usefulness, as the reader who is interested in any particular industry readily finds all the details relating to it in the appropriate place. This analysis deals principally with the tables contained in the first part, pages 1 to 60, with such reference to the detailed industry presentations as is required to effectually deal with the statistics given.

## PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

### PRIVATE FIRMS AND CORPORATIONS.

The tables relating to private firms and corporations and partners and stockholders will be found upon pages 3 to 12. The number of establishments, each of which made return for the years 1892 and 1893, was 4,397. In 1892 these establishments were managed by 3,534 private firms and 820 corporations. In 1893, the number of private firms was reduced to 3,478, a decrease of 1.58 per cent and the number of corporations advanced to 872, an increase of 6.34 per cent. It is quite evident, from these figures, that the tendency to assume the corporate form of management still continues.

The following table indicates the effect, in the aggregate, of the change from private firms to corporations in 1893 as compared with 1892:

PRIVATE FIRMS AND CORPORATIONS.	NUMBER		PERCENTAGES	
	1892	1893	1892	1893
Private firms, . . . . .	3,534	3,478	81.17	79.95
Corporations, . . . . .	820	872	18.83	20.05
TOTALS, . . . . .	4,354	4,350	100.00	100.00

The numerical effect of the changes indicated in this table has been noted. When expressed in percentages it is seen that in 1892 the corporations constituted 18.83 per cent of the entire number of establishments; in 1893 the percentage rose to 20.05. Of course, the rate of increase indicated by these figures is small, but, nevertheless, it is in line with the present

tendency toward a corporate form of management which has been noted for a number of years.

In the head-notes to the tables on pages 4, 5, 8, and 9, it is stated that there are duplications to be found in the columns devoted to the number of private firms and corporations, and it is explained that these duplications are caused by the fact that the same firm or corporation is often engaged in conducting two or more establishments in different towns and, it may be, in different industries. The plan adopted in the statistical presentations is to consider each establishment, whether managed in connection with another or not, as a unit, and to credit to each establishment its own number of partners or stockholders, and to each industry its own number of firms or corporations carrying on the establishments, but, when considering the total for All Industries, to count them once only. The word "establishment" as used in this report means the factory, mill, or shop from which a report was received, and not the firm or corporation owning or controlling said factory, mill, or shop. There are no duplications so far as the establishments are concerned.

In the following table is shown the number of duplications in private firms and corporations, by industries, for the years 1892 and 1893 :

INDUSTRIES.	PRIVATE FIRMS		CORPORATIONS	
	1892	1893	1892	1893
Boots and shoes, . . . . .	2	2	2	2
Boxes (paper and wooden), . . . . .	2	2	-	-
Cordage and twine, . . . . .	-	-	1	1
Cotton goods, . . . . .	-	-	3	3
Cotton, woollen, and other textiles, . . . . .	-	-	1	1
Food preparations, . . . . .	-	-	2	3
Hosiery and knit goods, . . . . .	1	1	2	2
Leather, . . . . .	1	1	-	1
Liquors: malt, distilled, and fermented, . . . . .	-	-	2	2
Machines and machinery, . . . . .	-	-	2	2
Metals and metallic goods, . . . . .	-	-	-	1
Paper and paper goods, . . . . .	1	1	4	4
Printing, publishing, and bookbinding, . . . . .	1	1	-	-
Print works, dye works, and bleacheries, . . . . .	-	-	3	3
Railroad construction and equipment, . . . . .	-	-	6	6
Rubber and elastic goods, . . . . .	1	1	-	-
Woollen goods, . . . . .	3	3	2	3
Worsted goods, . . . . .	-	-	1	1
TOTALS, . . . . .	12	12	31	35

This table indicates that in the presentations relating to private firms and corporations 43 duplications occurred in 1892 and 47 in 1893; these duplications refer to the same concerns in each year. The excess in 1893 of four duplications over the number shown in 1892 indicates a change in management and the consolidation of separate interests into the trust or syndicate form of control. As pointed out in previous reports, in connection with this subject, it should be understood that only the number of partners and stockholders are affected by these duplications. The returns relating to capital invested, stock used, goods made, persons employed, and wages paid are made separately for each establishment, and in the tabular presentations are credited to the industry to which they properly belong.

#### PARTNERS AND STOCKHOLDERS.

The same partners and stockholders are sometimes connected with more than one establishment, and therefore, under the plan of tabulation adopted by this department, noted on the preceding page, the whole number of partners and stockholders is credited to each industry, individuals being counted but once in making up the total for All Industries.

The duplications in partners and stockholders are shown in the following table :

INDUSTRIES.	PARTNERS		STOCKHOLDERS	
	1892	1893	1892	1893
Boots and shoes, . . . . .	4	4	10	10
Boxes (paper and wooden), . . . . .	4	4	-	-
Cordage and twine, . . . . .	-	-	6	6
Cotton goods, . . . . .	-	-	97	99
Cotton, woollen, and other textiles, . . . . .	-	-	452	463
Food preparations, . . . . .	-	-	*2	*3
Hosiery and knit goods, . . . . .	5	3	611	621
Leather, . . . . .	2	2	-	69
Liquors: malt, distilled, and fermented, . . . . .	-	-	*2	*2
Machines and machinery, . . . . .	-	-	651	713
Metals and metallic goods, . . . . .	-	-	-	*1
Paper and paper goods, . . . . .	5	4	44	64
Printing, publishing, and bookbinding, . . . . .	1	1	-	4
Print works, dye works, and bleacheries, . . . . .	-	-	661	673
Railroad construction and equipment, . . . . .	-	-	†6	†6
Rubber and elastic goods, . . . . .	2	2	-	-
Woollen goods, . . . . .	8	8	216	224
Worsted goods, . . . . .	-	-	187	197
TOTALS, . . . . .	81	28	2,945	3,153

\* Syndicates.

† Railroads.

Considering the total line in the above table, it is seen that in 1892 there were 31 duplications in the number of partners and 2,945 in the number of stockholders; in 1893 there were 28 duplications in the number of partners and 3,153 in the number of stockholders.

The following table indicates the number of general partners (male and female), the number of special partners, and the number of estates, engaged in managing the private firms represented in 1892 and 1893 :

PARTNERS.	NUMBER		PERCENTAGES	
	1892	1893	1892	1893
General partners, . . . . .	5,600	5,421	98.75	98.22
Special partners, . . . . .	59	59	1.04	1.07
Estates, . . . . .	12	39	0.21	0.71
TOTALS, . . . . .	5,671	5,519	100.00	100.00

From the table it appears that the number of male and female general partners constituted 98.75 per cent of the whole number of partners in 1892 and 98.22 per cent in 1893; the representation of partners actively engaged in the management of the different concerns being nearly the same in each year when expressed in percentages, although the whole number declined from 5,671 in 1892 to 5,519 in 1893.

A classification of partners by sex, together with the number of special partners and estates, is shown for each year in the following table :

PARTNERS.	NUMBER		PERCENTAGES	
	1892	1893	1892	1893
Males, . . . . .	5,477	5,292	96.58	95.89
Females, . . . . .	123	129	2.17	2.34
Special and estates, . . . . .	71	98	1.25	1.77
TOTALS, . . . . .	5,671	5,519	100.00	100.00

The number of males declined from 5,477 in 1892 to 5,292 in 1893, a decrease of 3.38 per cent. The number of females rose from 123 to 129, an increase of 4.88 per cent, and the

number of special partners and estates increased from 71 to 98, an increase of 38.03 per cent.

A classification of stockholders by sex is shown in the following table :

STOCKHOLDERS.	NUMBER		PERCENTAGES	
	1892	1893	1892	1893
Males, . . . . .	21,848	21,919	68.95	57.25
Females, . . . . .	11,653	12,301	31.44	32.13
Banks, trustees, etc., . . . . .	8,568	4,064	9.61	10.62
TOTALS, . . . . .	37,064	38,284	100.00	100.00

The number of male stockholders increased from 21,848 in 1892 to 21,919 in 1893, a gain of 0.32 per cent; the number of females increased from 11,653 to 12,301, a gain of 5.56 per cent.

The relative proportions of the sexes controlling the aggregate number of establishments are shown in the following table in which partners and stockholders are consolidated :

PARTNERS AND STOCKHOLDERS.	NUMBER		PERCENTAGES	
	1892	1893	1892	1893
Males, . . . . .	27,325	27,211	63.94	62.12
Females, . . . . .	11,776	12,430	27.56	28.38
Banks, trustees, etc., . . . . .	8,634	4,162	8.50	9.50
TOTALS, . . . . .	42,735	43,803	100.00	100.00

The total number of partners and stockholders in 1893 was 43,803 as against 42,735 in 1892. The males decreased from 27,325 to 27,211, and the proportion of males to the total number declined from 63.94 per cent to 62.12 per cent. On the other hand, the number of females increased from 27.56 per cent to 28.38 per cent.

In the following table the aggregate number of partners and stockholders, without regard to sex, is brought forward with percentages :

PARTNERS AND STOCKHOLDERS.	NUMBER		PERCENTAGES	
	1892	1893	1892	1893
Partners, . . . . .	5,671	5,519	13.27	12.60
Stockholders, . . . . .	37,064	38,284	86.73	87.40
TOTALS, . . . . .	42,735	43,803	100.00	100.00

The change from the private firm to the corporate form of business management, reflected in the tendency which we have noted from year to year, carried the percentage of stockholders from 86.73 in 1892 to 87.40 in 1893. The percentage of partners exhibited a corresponding decline from 13.27 in 1892 to 12.60 in 1893. Expressed in figures, the total number of stockholders in 1892 was 37,064, rising to 38,284 in 1893; while the total number of partners in 1892 was 5,671, declining to 5,519 in 1893. It should be borne in mind that these stockholders and partners were engaged in managing identical establishments in each of the years named; that is, the changes which have been noted, took place in 1893 within the same group of establishments.

The final analysis table relating to the subject of partners and stockholders exhibits the effect of the change from the private firm to the corporation upon the number of partners in the aggregate and in the average :

CLASSIFICATION.	NUMBER	
	1892	1893
Private firms, . . . . .	3,534	3,478
Partners, . . . . .	5,671	5,519
Average number of partners to a private firm, . . . . .	1.60	1.59
Corporations, . . . . .	820	872
Stockholders, . . . . .	37,064	38,284
Average number of stockholders to a corporation, . . . . .	45.20	43.90

The average number of partners to a private firm was 1.60 in 1892 and 1.59 in 1893, while the average number of stockholders to a corporation was 45.20 in 1892 and 43.90 in 1893; so that although the number of corporations increased



from 820 to 872, and the number of private firms declined from 3,534 to 3,478, the average number of partners to a private firm remained practically the same in each year, while the slight variation of 1.30 per cent is shown in the average number of stockholders to a corporation.

The returns relating to private firms, corporations, partners, and stockholders for 1893 are condensed into the following summary: The returns represent 4,397 establishments found in 75 different industries. The establishments are conducted by 3,478 private firms and 872 corporations. Expressed in percentages, 79.95 of the establishments are in the hands of private firms and 20.05 in the hands of corporations. The private firms and corporations are managed by 43,803 individuals, of whom 5,519, or 12.60 per cent, are partners and 38,284, or 87.40 per cent, are stockholders. Of the partners, 95.89 per cent are males, 2.34 per cent females, and 1.77 per cent estates, etc. Of the stockholders, 57.25 per cent are males, 32.13 per cent are females, and 10.62 per cent are banks, trustees, etc. Considering the partners and stockholders in the aggregate, 62.12 per cent are males, 28.38 per cent are females, and 9.50 per cent are banks, trustees, etc. The average number of partners to a private firm is 1.59, and the average number of stockholders to a corporation, 43.90.

### CAPITAL INVESTED: BY INDUSTRIES.

In the table on pages 14 and 15 comparison is made of the amount of capital invested in each of the 75 industries in 1892 and 1893. The total amount of capital reported by the 4,397 establishments, in the aggregate, was \$439,015,263 in 1892 and \$444,480,277 in 1893, an increase in the latter year of \$5,465,014, or 1.24 per cent.

The following industries, 41 in number, exhibit an increase in capital invested in 1893 as compared with 1892:

Arms and Ammunition.  
Artisans' Tools.  
Boots and Shoes.  
Boxes (Paper and Wooden).  
Brick, Tiles, and Sewer Pipe.  
Brooms, Brushes, and Mops.

Buttons and Dress Trimmings.  
Carpetings.  
Carriages and Wagons.  
Cement, Kaolin, Lime, and Plaster.  
Chemical Preparations (Compound-  
ed).

Cordage and Twine.  
 Drugs and Medicines.  
 Dyestuffs.  
 Electrical Apparatus and Appliances.  
 Emery and Sand Paper and Cloth,  
     etc.  
 Fancy Articles, etc.  
 Fertilizers.  
 Fine Arts and Taxidermy.  
 Glass.  
 Hair Work (Animal and Human).  
 Hosiery and Knit Goods.  
 Liquors and Beverages (Not Spirit-  
     uous).  
 Liquors: Malt, Distilled, and Fer-  
     mented.  
 Lumber.  
 Machines and Machinery.

Models, Lasts, and Patterns.  
 Musical Instruments and Materials.  
 Oils and Illuminating Fluids.  
 Paper and Paper Goods.  
 Polishes and Dressing.  
 Printing, Publishing, and Bookbind-  
     ing.  
 Print Works, Dye Works, and Bleach-  
     eries  
 Rubber and Elastic Goods.  
 Shipbuilding.  
 Silk and Silk Goods.  
 Sporting and Athletic Goods.  
 Straw and Palm Leaf Goods.  
 Tallow, Candles, Soap, and Grease.  
 Whips, Lashes, and Stocks.  
 Wooden Goods.

The following 33 industries show a decrease in amount of capital invested in 1893 as compared with 1892 :

Agricultural Implements.  
 Awnings, Sails, Tents, etc.  
 Burial Cases, Caskets, Coffins, etc.  
 Clocks, Watches, and Jewelry.  
 Clothing.  
 Cooking, Lighting, and Heating Ap-  
     paratus.  
 Corks, Bungs, and Taps.  
 Cotton Goods.  
 Cotton, Woollen, and Other Textiles.  
 Earthen, Plaster, and Stone Ware.  
 Electroplating.  
 Flax, Hemp, Jute, and Linen Goods.  
 Food Preparations.  
 Furniture.  
 Glue, Isinglass, and Starch.  
 Hose: Rubber, Linen, etc.  
 Ink, Mucilage, and Paste.  
 Ivory, Bone, Shell, and Horn Goods,  
     etc.

Leather.  
 Metals and Metallic Goods.  
 Mixed Textiles.  
 Paints, Colors, and Crude Chemicals.  
 Perfumes, Toilet Articles, etc.  
 Photographs and Photographic Ma-  
     terials.  
 Railroad Construction and Equip-  
     ment.  
 Saddlery and Harness.  
 Scientific Instruments and Appli-  
     ances.  
 Stone.  
 Tobacco, Snuff, and Cigars.  
 Toys and Games (Children's).  
 Trunks and Valises.  
 Woollen Goods.  
 Worsted Goods.

The percentages of increase, as shown by the table on pages 14 and 15, range from 0.13 per cent in Brooms, Brushes, and Mops, to 30.30 per cent in Fine Arts and Taxidermy. The range of decrease is from 0.02 per cent in Earthen, Plaster,

and Stone Ware, to 28.07 in Corks, Bungs, and Taps. In Crayons, Pencils, Crucibles, etc. the capital invested remained the same in both years.

If we classify the establishments in nine selected industries, representing 44.10 per cent of the 4,397 establishments from which returns have been received, we obtain the following table:

INDUSTRIES.	Number of Estab- lishments Con- sidered	AMOUNT OF CAPITAL INVESTED		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Boots and shoes, . . . .	712	\$29,067,583	\$29,303,026	+\$235,443	+0.81
Carpetings, . . . . .	11	7,828,754	7,993,248	+164,494	+2.10
Cotton goods, . . . . .	149	119,652,351	118,855,744	-796,607	-0.67
Leather, . . . . .	148	8,011,549	7,963,904	-47,645	-0.59
Machines and machinery, . .	335	80,811,473	82,917,618	+2,106,145	+6.84
Metals and metallic goods, .	341	20,780,435	20,390,350	-390,085	-1.88
Paper and paper goods, . .	98	21,944,434	23,137,410	+1,192,976	+5.44
Woollen goods, . . . . .	125	27,220,349	25,554,880	-1,665,469	-6.12
Worsted goods, . . . . .	20	12,182,889	11,088,952	-1,093,937	-9.02
Other industries, . . . . .	2,458	161,565,446	167,325,145	+5,759,699	+3.56
ALL INDUSTRIES, . . . .	4,397	\$439,015,263	\$444,480,277	+\$5,465,014	+1.24

The industries mentioned in detail in the above table are the principal industries of the State. The capital invested in the establishments returned in them was \$277,449,817 in 1892, or 63.20 per cent of the total capital, and \$277,155,132 in 1893, or 62.35 per cent of the total capital for All Industries. The 2,458 establishments included in the line "other industries" increased their capitalization from \$161,565,446 in 1892 to \$167,325,145 in 1893, a gain of 3.56 per cent. Of the leading industries there are four in which an increase of capital is shown and five which exhibit a decrease. The percentages indicate but slight changes, the increase or decrease in no case reaching ten per cent.

In this connection, it becomes necessary for us to call renewed attention to certain qualifying conditions affecting the results shown in the tables, so that unwarranted deductions from the returns may not be made. In the first place, the term "capital," as used in these reports, does not mean merely cash capital, or capital stock, but includes all forms of capital devoted to production. It includes not only cash, but notes or bills receivable, and the value of land, machinery, and

stock on hand or in process of manufacture; therefore the aggregate amounts stated as capital invested in the different industries include the actual capital of all forms found in the industry at the time of making the return. Inasmuch as some of the elements included as capital are variable from year to year, it follows that apparently wide fluctuations in the amount of capital invested will sometimes appear in the returns. A reduction in capital in any industry does not, of course, imply retrogression. It is clear that a small amount of stock on hand, or in process of manufacture, at the time the return is made, would have its effect in showing diminished capitalization, without, of course, affecting the condition of the industry. On the other hand, an investment in stock purchased in a favorable market, the same being held at the time of making the return, would render the amount of capital invested relatively larger than would be found at a time when the stock on hand was comparatively light.

### STOCK USED: BY INDUSTRIES.

The term "stock used" includes all kinds of materials consumed in the establishment, whether entering into the fabric article or consumed in the processes necessary to the production of the goods.

The table on pages 18 and 19 presents a comparison of the value of stock used in the different establishments making returns in each of the years 1892 and 1893. The table in detail requires no special analysis. In All Industries the total value of stock used was \$376,554,375 in 1892 and \$348,991,905 in 1893, a decrease of \$27,562,470, or 7.32 per cent. It will be noted that a decrease in value is shown in all the industries mentioned except the following in which an increase occurs:

Artisans' Tools.  
Burial Cases, Caskets, Coffins, etc.  
Cement, Kaolin, Lime, and Plaster.  
Cotton Goods.  
Electroplating.  
Fertilizers.  
Flax, Hemp, Jute, and Linen Goods.  
Glue, Isinglass, and Starch.  
Liquors and Beverages (Not Spirituous).

Perfumes, Toilet Articles, etc.  
Railroad Construction and Equipment.  
Rubber and Elastic Goods.  
Shipbuilding.  
Stone.  
Straw and Palm Leaf Goods.  
Tobacco, Snuff, and Cigars.

The percentages of increase range from 0.94 in Rubber and Elastic Goods to 109.96 in Railroad Construction and Equipment.

For the purpose of comparing the nine leading industries, we present the following table:

INDUSTRIES.	Number of Estab- lishments Con- sidered	VALUE OF STOCK USED		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Boots and shoes, . . . .	712	\$62,667,535	\$55,028,688	—\$7,638,847	—12.19
Carpetings, . . . .	11	5,218,619	4,787,252	—431,367	—8.27
Cotton goods, . . . .	149	46,961,841	47,411,932	+450,091	+0.96
Leather, . . . .	148	11,891,499	11,033,354	—858,145	—7.22
Machines and machinery, . .	335	11,465,690	10,124,464	—1,341,226	—11.70
Metals and metallic goods, .	341	12,723,710	10,863,682	—1,860,028	—14.62
Paper and paper goods, . .	98	15,170,117	14,376,840	—793,277	—5.23
Woollen goods, . . . .	125	20,360,682	16,674,542	—3,686,140	—18.10
Worsted goods, . . . .	20	12,239,108	9,948,697	—2,290,411	—18.71
Other industries, . . . .	2,458	177,855,574	168,742,454	—9,113,120	—5.12
ALL INDUSTRIES, . . . .	4,397	\$376,554,375	\$348,991,905	—\$27,562,470	—7.32

The establishments in the selected industries presented in the above table represent 44.10 per cent of the total number of establishments making returns for both years. The stock used in these industries represents 52.77 per cent of the total stock used in 1892 and 51.65 per cent of the total stock used in 1893. The decrease in the value of stock used in the nine industries, in 1893 as compared with 1892, is 9.29 per cent; the decrease in other industries is 5.12 per cent; and for All Industries 7.32 per cent. The only industry which exhibits an increase in value of stock used in the above table is Cotton Goods, the percentage of increase being 0.96.

If the reader will refer to the detailed industry presentations, pages 61 to 274, the reason for increase or decrease in the value of stock used in the nine leading industries will, in some instances, be seen. From the details there presented of stock and product, and the average values of materials, etc., it will frequently appear that the total value of stock has decreased or increased on account of the change in value of particular articles consumed. A decrease in value may not always mean a decrease in quantity of materials consumed, but, as indicated by the detailed presentations, a decrease in average value per basis.

## GOODS MADE: BY INDUSTRIES.

The table on pages 23 and 24 presents a comparison of the value of goods made in the different establishments supplying returns for the years 1892 and 1893. The total value of goods made and work done in the 4,397 establishments was, in 1892, \$639,137,402 and in 1893, \$587,343,550, showing a decrease in the last named year of \$51,793,852, or 8.10 per cent.

This is the first time since the inauguration of these reports that a decrease has been shown, when considering All Industries, and the extent of the decrease is very large when it is noted that out of the 75 industries containing 4,397 establishments but 13 industries with 389 establishments exhibit an increase in the value of goods made. These 13 industries produced goods in 1893 to the value of \$51,138,478, or but 8.71 per cent of the total value of product for All Industries in 1893.

As before stated, the decrease in value of goods made in 1893 as compared with 1892, is 8.10 per cent. The following industries show a decrease greater than that shown for All Industries: Awnings, Sails, Tents, etc., 18.30 per cent; Boots and Shoes, 10.72 per cent; Buttons and Dress Trimmings, 12.93 per cent; Carpetings, 9.58 per cent; Chemical Preparations (Compounded), 17.58 per cent; Clocks, Watches, and Jewelry, 18.15 per cent; Clothing, 11.99 per cent; Cotton, Woollen, and other Textiles, 16.54 per cent; Crayons, Pencils, Crucibles, etc., 37.40 per cent; Dyestuffs, 36.19 per cent; Electrical Apparatus and Appliances, 41.22 per cent; Emery and Sand Paper and Cloth, etc., 23.88 per cent; Fancy Articles, etc., 9.37 per cent; Furniture, 11.45 per cent; Glass, 19.03 per cent; Hair Work (Animal and Human), 26.37 per cent; Hosiery and Knit Goods, 11.79 per cent; Ivory, Bone, Shell, and Horn Goods, etc., 9.48 per cent; Leather, 16.60 per cent; Lumber, 8.44 per cent; Metals and Metallic Goods, 12.88 per cent; Mixed Textiles, 10.90 per cent; Models, Lasts, and Patterns, 10.21 per cent; Musical Instruments and Materials, 37.12 per cent; Oils and Illuminating Fluids, 8.12 per cent; Paper and Paper Goods, 12.61 per cent; Perfumes, Toilet Articles, etc., 10.96 per cent; Photographs and Photographic Materials, 25.45 per cent; Polishes and Dressing, 8.71 per cent; Saddlery and Harness, 25.49 per cent; Scientific Instru-

ments and Appliances, 8.98 per cent; Silk and Silk Goods, 20.44 per cent; Sporting and Athletic Goods, 25.51 per cent; Trunks and Valises, 18.67 per cent; Whips, Lashes, and Stocks, 8.37 per cent; Woollen Goods, 17.65 per cent; and Worsted Goods, 10.39 per cent.

If the same leading industries, which have previously been selected for comparison, be considered as to increase or decrease in value of product, we obtain the following table :

INDUSTRIES.	Number of Establishments Considered	VALUE OF GOODS MADE AND WORK DONE		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percentages
Boots and shoes, . . . .	712	\$103,878,008	\$92,740,686	—\$11,137,412	—10.72
Carpetings, . . . .	11	8,214,540	7,427,385	—787,155	—9.58
Cotton goods, . . . .	149	90,811,928	88,189,618	—2,622,310	—2.89
Leather, . . . .	148	18,644,270	16,548,822	—3,095,448	—16.60
Machines and machinery, . .	335	29,900,988	27,975,359	—1,925,629	—6.43
Metals and metallic goods, .	341	26,259,252	22,878,245	—3,381,007	—12.88
Paper and paper goods, . .	98	26,029,658	22,746,104	—3,283,554	—12.61
Woollen goods, . . . .	125	34,074,848	28,061,654	—6,013,194	—17.65
Worsted goods, . . . .	20	17,328,062	15,528,227	—1,799,835	—10.39
Other industries, . . . .	2,458	283,935,758	266,247,450	—17,688,308	—6.23
ALL INDUSTRIES, . . .	4,397	\$639,137,402	\$587,343,550	—\$51,793,852	—8.10

The total value of goods made and work done in these nine selected industries represents 55.58 per cent of the aggregate value for All Industries in 1892 and 54.67 per cent in 1893. The decrease in the value of goods made and work done shown for these selected industries in 1893 as compared with 1892 is \$34,105,544, or 9.60 per cent. All other industries comprised in the returns, aggregating 2,458 establishments, show a decrease of \$17,688,308, or 6.23 per cent. It will be noted that every industry in the selected list exhibits a decrease in value of product, ranging from 2.89 per cent in Cotton Goods to 17.65 per cent in Woollen Goods.

On page 240 of the report on Annual Statistics of Manufactures for 1891, it is shown, taking the returns from 1,130 establishments in 1887 and each subsequent year, that in 1891 as compared with 1887, an increase of 12 per cent was found, or an average increase of three per cent in each year. We have, in previous reports, accepted this average as indicating the normal rate of increase in the industries as a whole from year to year.



In the following table we present the increase in value of goods made and work done each year, as shown by former published reports beginning with the year 1886 :

COMPARATIVE YEARS.	Number of Establish- ments Considered in Each Year Compared	INCREASE (+), OR DECREASE (—), IN VALUE OF GOODS MADE AND WORK DONE IN EACH YEAR AS COMPARED WITH THE PREVIOUS YEAR	
		Amounts	Percentages
1886, 1887, . . . . .	1,027	+\$18,919,859	+5.29
1887, 1888, . . . . .	1,140	+11,168,095	+3.61
1888, 1889, . . . . .	1,364	+9,653,992	+2.45
1889, 1890, . . . . .	3,041	+22,838,970	+4.37
1890, 1891, . . . . .	3,745	+8,068,053	+1.33
1891, 1892, . . . . .	4,473	+33,180,865	+5.37
1892, 1893, . . . . .	4,397	—51,793,852	—8.10

The above table indicates an increase in the value of goods made and work done in 1887 as compared with 1886 (1,027 establishments making return) of 5.29 per cent; in 1888 as compared with 1887 (1,140 establishments) an increase of 3.61 per cent; in 1889 as compared with 1888 (1,364 establishments) an increase of 2.45 per cent; in 1890 as compared with 1889 (3,041 establishments) the increase amounted to 4.37 per cent; in 1891 as compared with 1890 (3,745 establishments) the increase was but 1.33 per cent; in 1892 when compared with 1891 (4,473 establishments) the increase was 5.37 per cent, the largest increase yet shown; but in 1893 as compared with 1892 (4,397 establishments) for the first time a decrease appears, the percentage being 8.10. The average rate of increase in each comparative year, except 1892, 1893, is 3.74 per cent, a little above the “normal rate of increase” which, as we have said, was shown in the report for 1891 to be three per cent; but the conditions have been changed in 1893 for the normal rate is lost completely when comparing this year with 1892, and in place of a healthful increase a large decrease is exhibited which has the effect of reducing the average rate of increase in each comparative year to 2.05 per cent.

On pages 25 to 35 a table appears which permits comparison, as regards the value of goods made and work done in each industry, between any two of five consecutive years beginning with 1889. The table presents the value of goods made and work done in each year of the five, the returns being made by



the same establishments each year. The total number of these establishments is 2,472; the results in the aggregate are brought forward in the following analysis table:

YEARS.	Number of Estab- lishments Con- sidered	Value of Goods Made and Work Done	INCREASE (+), OR DECREASE (-), AS COMPARED WITH PREVIOUS YEAR	
			Amounts	Percentages
1889, . . . . .	2,472	\$465,447,602	-	-
1890, . . . . .	2,472	496,024,255	+\$30,576,653	+6.57
1891, . . . . .	2,472	501,768,326	+5,744,071	+1.16
1892, . . . . .	2,472	530,131,769	+28,363,443	+5.65
1893, . . . . .	2,472	484,288,854	-45,842,915	-8.65

The total value of goods made and work done in the 2,472 establishments represented in the year 1889 was \$465,447,602, rising to \$496,024,255 in 1890, a gain of 6.57 per cent. In 1891 a further gain of 1.16 per cent was made and in 1892 the gain was even larger, being 5.65 per cent, but in 1893 as compared with 1892, the product value declined from \$530,131,769 to \$484,288,854, a loss of 8.65 per cent. In regard to the nine leading industries the following facts appear from the table beginning on page 25: In Boots and Shoes an increase in product is shown in 1890 as compared with 1889 and in 1892 as compared with 1891; a decrease is shown in the other years. The same facts are also shown for Cotton Goods, Leather, and Metals and Metallic Goods. In Carpetings, an increase in product is shown in 1890 as compared with 1889 and in 1891 as compared with 1890, while a decrease in product value is shown in both 1892 and 1893 in comparison with each previous year. In Machines and Machinery an increase is found in 1892 as compared with 1891, and a decrease in each of the other years as compared with the year previous. In Paper and Paper Goods and Woollen Goods a decrease is found in 1890 as compared with 1889 and in 1893 as compared with 1892, but an increase is shown in 1891 as compared with 1890 and in 1892 as compared with 1891. In Worsted Goods a decline is found in 1893 as compared with 1892, but in each of the other years an increase appears as compared with the year previous.

It may be interesting to place in comparison for the nine leading industries and for All Industries, the number of establishments considered in the two year comparison (pages 23 and 24) and in the five year comparison (pages 25 to 35) together

with the percentages of decrease in value of product. This is shown below :

INDUSTRIES.	NUMBER OF ESTABLISHMENTS CONSIDERED IN THE —		PERCENTAGES OF DECREASE IN VALUE OF PRODUCT IN THE —	
	Two Year Comparison	Five Year Comparison	Two Year Comparison	Five Year Comparison
Boots and shoes, . . . . .	712	847	10.72	12.17
Carpetings, . . . . .	11	9	9.58	7.52
Cotton goods, . . . . .	149	186	2.89	4.86
Leather, . . . . .	148	96	16.60	15.71
Machines and machinery, . . . . .	335	155	6.63	6.76
Metals and metallic goods, . . . . .	341	180	12.88	12.99
Paper and paper goods, . . . . .	98	73	12.61	11.94
Woollen goods, . . . . .	125	98	17.65	17.82
Worsted goods, . . . . .	20	16	10.39	9.22
ALL INDUSTRIES, . . . . .	4,397	2,472	8.10	8.65

It is to be understood that the comparison made above is between 1892 and 1893, and that the 2,472 establishments, which enter into the five year comparison, are also included among the 4,397 establishments which are presented in the two year comparison. It is seen that in Boots and Shoes, Cotton Goods, Machines and Machinery, Metals and Metallic Goods, and All Industries the percentages of decrease are higher in the five year comparison; the percentages are lower in Carpetings, Leather, Paper and Paper Goods, Woollen Goods, and Worsted Goods.

In the following table, the returns for 2,472 establishments for 1890 and each subsequent year, are compared with each previous year beginning with 1889 :

CLASSIFICATION.	INCREASE (+), OR DECREASE (—), IN THE VALUE OF GOODS MADE AND WORK DONE	
	Amounts	Percentages
1890 as compared with 1889, . . . . .	+30,576,653	+6.57
1891 as compared with 1889, . . . . .	+36,320,724	+7.80
1892 as compared with 1889, . . . . .	+64,684,167	+13.90
1893 as compared with 1889, . . . . .	+18,841,252	+4.05
1891 as compared with 1890, . . . . .	+5,744,071	+1.16
1892 as compared with 1890, . . . . .	+34,107,514	+6.88
1893 as compared with 1890, . . . . .	—11,785,401	—2.87
1892 as compared with 1891, . . . . .	+23,363,443	+5.65
1893 as compared with 1891, . . . . .	—17,479,472	—3.48
1893 as compared with 1892, . . . . .	—45,842,915	—8.65

In 1893 as compared with 1889 an increase of 4.05 per cent appears, or an average increase of 1.01 per cent per year, which is below the normal rate previously alluded to. In 1893 as compared with 1890 a decrease of 2.37 per cent is found rising to 3.48 per cent when 1893 is compared with 1891, and to 8.65 per cent when comparing 1893 with 1892.

These comparisons for the five specified years are based upon the leading establishments making returns for each of the years. The number of such establishments is 2,472 and the value of goods made and work done in 1893 was \$484,288,854, or 82.45 per cent of the value of goods made and work done in 1893 for the 4,397 establishments shown in the two year comparison on pages 23 and 24. From the returns of these 2,472 establishments the following graphic presentation is derived, which exhibits the fact of increase or decrease in product in each of the industries in each of the years subsequent to 1889 as compared with the product returned in 1889, the sign (+) indicating a gain and the sign (—) a decrease:

INDUSTRIES.	1890 as Compared with 1889	1891 as Compared with 1889	1892 as Compared with 1889	1893 as Compared with 1889
Agricultural implements, . . . . .	+	—	—	—
Arms and ammunition, . . . . .	+	+	+	+
Artisans' tools, . . . . .	+	+	+	+
Awnings, sails, tents, etc., . . . . .	+	+	+	+
Boots and shoes, . . . . .	+	+	+	+
Boxes (paper and wooden), . . . . .	+	+	+	+
Brick, tiles, and sewer pipe, . . . . .	+	+	+	+
Brooms, brushes, and mops, . . . . .	+	+	+	+
Burial cases, caskets, coffins, etc., . . . . .	—	—	—	+
Buttons and dress trimmings, . . . . .	—	+	+	—
Carpetings, . . . . .	+	+	+	+
Carriages and wagons, . . . . .	+	+	+	+
Cement, kaolin, lime, and plaster, . . . . .	—	—	—	—
Chemical preparations (compounded), . . . . .	+	+	+	+
Clocks, watches, and jewelry, . . . . .	+	+	+	—
Clothing, . . . . .	+	+	+	—
Cooking, lighting, and heating apparatus, . . . . .	—	+	+	—
Cordage and twine, . . . . .	+	+	+	+
Corks, bungs, and taps, . . . . .	—	—	—	—
Cotton goods, . . . . .	+	+	+	—
Cotton, woollen, and other textiles, . . . . .	+	+	+	—
Crayons, pencils, crucibles, etc., . . . . .	+	+	—	—
Drugs and medicines, . . . . .	+	+	+	+
Dyestuffs, . . . . .	—	—	—	—

INDUSTRIES.	1890 as Compared with 1889	1891 as Compared with 1889	1892 as Compared with 1889	1893 as Compared with 1889
Earthen, plaster, and stone ware, . . .	+	+	+	+
Electrical apparatus and appliances, . .	+	+	+	+
Electroplating, . . . . .	—	+	+	+
Emery and sand paper and cloth, etc., . .	+	+	+	—
Fancy articles, etc., . . . . .	+	+	+	+
Fertilizers, . . . . .	—	—	—	—
Fine arts and taxidermy, . . . . .	+	+	+	+
Flax, hemp, jute, and linen goods, . . .	+	+	+	+
Food preparations, . . . . .	+	+	+	+
Furniture, . . . . .	+	+	+	+
Glass, . . . . .	—	+	+	—
Glue, isinglass, and starch, . . . . .	+	+	+	+
Hair work (animal and human), . . . .	+	+	+	+
Hosiery and knit goods, . . . . .	+	+	+	+
Ink, mucilage, and paste, . . . . .	+	+	+	+
Ivory, bone, shell, and horn goods, etc., .	+	+	+	—
Leather, . . . . .	+	—	+	—
Liquors and beverages (not spirituous), . .	+	+	+	+
Liquors: malt, distilled, and fermented, .	+	+	+	+
Lumber, . . . . .	+	+	+	+
Machines and machinery, . . . . .	—	—	+	—
Metals and metallic goods, . . . . .	+	+	+	—
Mixed textiles, . . . . .	+	+	+	—
Models, lasts, and patterns, . . . . .	+	+	+	+
Musical instruments and materials, . . .	+	+	+	—
Oils and illuminating fluids, . . . . .	—	+	—	—
Paints, colors, and crude chemicals, . . .	+	+	+	+
Paper and paper goods, . . . . .	—	+	+	—
Photographs and photographic materials, .	+	+	+	—
Polishes and dressing, . . . . .	+	+	+	+
Printing, publishing, and bookbinding, . .	—	—	+	—
Print works, dye works, and bleacheries, .	+	—	+	+
Railroad construction and equipment, . .	—	—	—	+
Rubber and elastic goods, . . . . .	+	+	+	+
Saddlery and harness, . . . . .	—	+	+	—
Scientific instruments and appliances, . .	+	+	+	+
Shipbuilding, . . . . .	+	+	+	+
Silk and silk goods, . . . . .	—	+	+	—
Sporting and athletic goods, . . . . .	+	+	+	+
Stone, . . . . .	—	—	—	—
Straw and palm leaf goods, . . . . .	+	+	+	+
Tallow, candles, soap, and grease, . . .	+	+	+	+
Tobacco, snuff, and cigars, . . . . .	+	+	+	+
Toys and games (children's), . . . . .	+	+	+	+
Trunks and valises, . . . . .	+	+	+	+
Whips, lashes, and stocks, . . . . .	+	+	+	+
Wooden goods, . . . . .	+	+	+	+
Woollen goods, . . . . .	—	+	+	—
Worsted goods, . . . . .	+	+	+	+
TOTALS, . . . . .	+	+	+	+

As shown by the foregoing table, the following 41 industries exhibit a gain in value of product in each subsequent year as compared with 1889 :

Arms and Ammunition.	Ink, Mucilage, and Paste.
Artisans' Tools.	Liquors and Beverages (Not Spirituous).
Awnings, Sails, Tents, etc.	Liquors: Malt, Distilled, and Fermented.
Boots and Shoes.	Lumber.
Boxes (Paper and Wooden).	Models, Lasts, and Patterns.
Brick, Tiles, and Sewer Pipe.	Paints, Colors, and Crude Chemicals.
Brooms, Brushes, and Mops.	Polishes and Dressing.
Carpetings.	Rubber and Elastic Goods.
Carriages and Wagons.	Scientific Instruments and Appliances.
Chemical Preparations (Compound- ed).	Shipbuilding.
Cordage and Twine.	Sporting and Athletic Goods.
Drugs and Medicines.	Straw and Palm Leaf Goods.
Earthen, Plaster, and Stone Ware.	Tallow, Candles, Soap, and Grease.
Electrical Apparatus and Appliances.	Tobacco, Snuff, and Cigars.
Fancy Articles, etc.	Toys and Games (Children's).
Fine Arts and Taxidermy.	Trunks and Valises.
Flax, Hemp, Jute, and Linen Goods.	Whips, Lashes, and Stocks.
Food Preparations.	Wooden Goods.
Furniture.	Worsted Goods.
Glue, Isinglass, and Starch.	
Hair Work (Animal and Human).	
Hosiery and Knit Goods.	

Not only is this statement true of the industries mentioned in detail, but all of the industries here represented exhibit, as shown by the total line of the preceding table, an increase in aggregate value of product each year beginning with 1890.

The following five industries show a yearly decline in value of product as compared with 1889 :

Cement, Kaolin, Lime, and Plaster.	Fertilizers.
Corks, Bungs, and Taps.	Stone.
Dyestuffs.	

Agricultural Implements exhibits an increase in 1890 as compared with 1889 but an annual decrease in 1891, 1892, and 1893. Burial Cases, Caskets, Coffins, etc., shows a decrease in product in 1890, 1891, and 1892 compared with 1889 with an increase in 1893 as compared with 1889; this is true also of Railroad Construction and Equipment. Buttons and Dress Trimmings exhibits a decrease in 1890 and 1893 as compared

with 1889 and an increase in 1891 and 1892 as compared with 1889 ; in this class are included Cooking, Lighting, and Heating Apparatus ; Glass ; Paper and Paper Goods ; Saddlery and Harness ; Silk and Silk Goods ; and Woollen Goods. The industries which show an increase in value of product in each year, except 1893, when compared with 1889 are Clocks, Watches, and Jewelry ; Clothing ; Cotton Goods ; Cotton, Woollen, and Other Textiles ; Emery and Sand Paper and Cloth, etc. ; Ivory, Bone, Shell, and Horn Goods, etc. ; Metals and Metallic Goods ; Mixed Textiles ; Musical Instruments and Materials ; and Photographs and Photographic Materials. Crayons, Pencils, Crucibles, etc., shows an increase in 1890 and 1891 as compared with 1889 but a decrease in 1892 and 1893. Print Works, Dye Works, and Bleacheries shows an increase in 1890, 1892, and 1893 when compared with 1889 but a decrease in 1891. An increase is shown in all years, save 1890, for Electroplating, and in Leather the years 1890 and 1892 only exhibit increase in product value. Increase only in 1892 as compared with 1889 is shown for Machines and Machinery and Printing, Publishing, and Bookbinding, and in 1891 only for Oils and Illuminating Fluids.

### PERSONS EMPLOYED: BY INDUSTRIES.

The statistical presentations relative to persons employed will be found upon pages 37 to 48. In the following analysis table, data as to the average number of persons employed in the nine leading industries are brought forward, in comparison with other industries, and with All Industries :

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGE NUMBER OF PERSONS EMPLOYED DURING THE YEAR		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Number	Percent- ages
Boots and shoes, . . . . .	712	48,859	45,389	-3,470	-7.10
Carpetings, . . . . .	11	4,703	4,335	-368	-7.82
Cotton goods, . . . . .	149	73,748	73,540	-208	-0.28
Leather, . . . . .	148	5,918	5,602	-316	-5.34
Machines and machinery, . . . . .	835	17,979	17,495	-484	-2.69
Metals and metallic goods, . . . . .	841	14,356	13,813	-1,043	-7.27
Paper and paper goods, . . . . .	98	10,085	9,658	-427	-4.23
Woollen goods, . . . . .	125	17,100	15,857	-1,243	-7.27
Worsted goods, . . . . .	20	8,996	9,025	+29	+0.32
Other industries, . . . . .	2,458	104,459	98,955	-5,504	-5.27
<b>ALL INDUSTRIES, . . . . .</b>	<b>4,397</b>	<b>306,203</b>	<b>293,169</b>	<b>-13,034</b>	<b>-4.26</b>

The final line of the table indicates that in the 4,397 establishments in All Industries, an average number of 306,203 persons was employed in 1892, and in 1893 these same establishments employed an average of 293,169 persons, a decrease of 13,034, or 4.26 per cent. All of the leading industries, except Worsted Goods, show a decrease in the average number of persons employed in 1893 as compared with 1892, the largest percentage of decrease being found in Carpetings, in which 4,703 persons were employed in the 11 establishments making return in 1892 and 4,335 persons in 1893, a decrease of 7.82 per cent.

The next highest percentage of decrease is found in Metals and Metallic Goods and Woollen Goods, the percentage being 7.27 in both industries. The other industries in the table show percentages of decrease as follows: Boots and Shoes, 7.10; Cotton Goods, 0.28; Leather, 5.34; Machines and Machinery, 2.69; and Paper and Paper Goods, 4.23; and, as stated above, an increase is shown in Worsted Goods of 0.32 per cent. In the line "other industries," which includes 2,458 establishments, the decrease in 1893 as compared with 1892 is 5.27 per cent.

Referring to the Industry Presentations, pages 61 to 274, we find a number of industries which exhibit a much larger percentage of decrease than is shown for All Industries, which, it will be remembered is 4.26. These are:

Arms and Ammunition.	Electrical Apparatus and Appliances.
Artisans' Tools.	Fancy Articles, etc.
Boots and Shoes.	Fertilizers.
Boxes (Paper and Wooden).	Food Preparations.
Brick, Tiles, and Sewer Pipe.	Furniture.
Buttons and Dress Trimmings.	Glass.
Carpetings.	Hair Work (Animal and Human).
Carriages and Wagons.	Ivory, Bone, Shell, and Horn Goods, etc.
Chemical Preparations (Compound- ed).	Leather.
Clocks, Watches, and Jewelry.	Liquors and Beverages (Not Spirit- uous).
Clothing.	Metals and Metallic Goods.
Cooking, Lighting, and Heating Apparatus.	Musical Instruments and Materials.
Corks, Bungs, and Taps.	Oils and Illuminating Fluids.
Cotton, Woollen, and other Textiles.	Perfumes, Toilet Articles, etc.
Crayons, Pencils, Crucibles, etc.	Photographs and Photographic Ma- terials.
Drugs and Medicines.	
Dyestuffs.	

Saddlery and Harness.  
 Scientific Instruments and Appli-  
 ances.  
 Silk and Silk Goods.  
 Sporting and Athletic Goods.

Toys and Games (Children's).  
 Trunks and Valises.  
 Whips, Lashes, and Stocks.  
 Wooden Goods.  
 Woollen Goods.

There are but 12 industries which exhibit an increase in the average number of persons employed, namely, Burial Cases, Caskets, Coffins, etc.; Earthen, Plaster, and Stone Ware; Flax, Hemp, Jute, and Linen Goods; Hose: Rubber, Linen, etc.; Hosiery and Knit Goods; Liquors: Malt, Distilled, and Fermented; Lumber; Railroad Construction and Equipment; Rubber and Elastic Goods; Shipbuilding; Stone; and Worsted Goods.

We have always pointed out in these reports that the amount of employment furnished in the different industries cannot be determined by merely considering the average number of persons employed. The statistical presentations therefore show the number of persons employed at the periods of employment of the smallest number, and also the number employed at the periods of employment of the greatest number. A comparison of the two, of course, indicates the range of unemployment. The first details as to the number employed at periods of employment of the smallest number in the nine leading industries, in the other industries, and in all industries in the aggregate, are brought forward in the following table:

INDUSTRIES.	Number of Estab- lishments Con- sidered	SMALLEST NUMBER OF PERSONS EMPLOYED		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Number	Percent- ages
Boots and shoes, . . . . .	712	40,761	34,039	-6,722	-16.49
Carpetings, . . . . .	11	4,434	1,917	-2,517	-56.77
Cotton goods, . . . . .	149	70,886	61,785	-9,101	-12.84
Leather, . . . . .	148	4,853	3,783	-1,070	-22.06
Machines and machinery, . . . . .	835	15,597	12,621	-2,976	-19.06
Metals and metallic goods, . . . . .	341	12,365	10,336	-2,029	-16.41
Paper and paper goods, . . . . .	98	9,197	8,015	-1,182	-12.85
Woollen goods, . . . . .	125	15,204	11,240	-3,964	-26.07
Worsted goods, . . . . .	20	8,117	6,791	-1,326	-16.34
Other industries, . . . . .	2,458	85,754	71,843	-13,911	-16.22
ALL INDUSTRIES, . . . . .	4,397	267,168	222,370	-44,798	-16.77

The final line of the table indicates that 267,168 persons were employed at the periods of employment of the smallest number in 1892, and at the corresponding periods in 1893, 222,370 per-



sons were employed, a decrease of 16.77 per cent. Each of the leading industries represented in the table employed a smaller number of persons in 1893 at the periods of employment of the smallest number than was employed in 1892; the percentages of decrease ranging from 12.84 in Cotton Goods to 56.77 in Carpetings. The decrease in Boots and Shoes was 16.49 per cent; in Leather, 22.05 per cent; in Machines and Machinery, 19.08 per cent; in Metals and Metallic Goods, 16.41 per cent; in Paper and Paper Goods, 12.85 per cent; in Woollen Goods, 26.07 per cent; and in Worsted Goods, 16.34 per cent. In the industries, other than those named in detail, an aggregate of 16.22 per cent less persons was employed at these periods in 1893 than in 1892.

A similar comparison as to the number of persons employed at the periods of employment of the greatest number is shown in the following table:

INDUSTRIES.	Number of Estab- lishments Con- sidered	GREATEST NUMBER OF PERSONS EMPLOYED		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Number	Percent- ages
Boots and shoes, . . . . .	712	56,611	55,065	-946	-1.67
Carpetings, . . . . .	11	4,919	5,031	+112	+2.28
Cotton goods, . . . . .	149	76,442	78,949	+2,507	+3.28
Leather, . . . . .	148	7,038	7,320	+282	+4.01
Machines and machinery, . . . . .	335	20,495	21,216	+721	+3.52
Metals and metallic goods, . . . . .	341	16,058	15,611	-447	-2.75
Paper and paper goods, . . . . .	98	10,724	10,754	+30	+0.28
Woollen goods, . . . . .	125	18,813	18,581	+268	+1.46
Worsted goods, . . . . .	20	9,813	10,270	+457	+4.66
Other industries, . . . . .	2,458	123,591	121,991	-1,600	-1.29
ALL INDUSTRIES, . . . . .	4,397	344,004	345,388	+1,384	+0.40

The number of persons employed at the periods of employment of the greatest number in All Industries in 1892 was 344,004, rising to 345,388 in 1893, a gain of 0.40 per cent. Worsted Goods shows the greatest percentage of increase, namely, 4.66; this is nearly matched in Leather, however, in which the percentage of increase is 4.01. The percentages of increase in the other industries are as follows: Carpetings, 2.28; Cotton Goods, 3.28; Machines and Machinery, 3.52; Paper and Paper Goods, 0.28; and Woollen Goods, 1.46. A decrease is shown in Boots and Shoes of 1.67 per cent and in

Metals and Metallic Goods of 2.78 per cent. In all other industries the aggregate decrease is 1.29 per cent.

For the purpose of exhibiting the range of unemployment year by year since 1886, as shown by the annual reports, the following table is presented :

COMPARATIVE YEARS.	Number of Estab- lishments Con- sidered	Aggregates : Persons Employed at Periods of Em- ployment of <i>Smallest</i> Number	Aggregates : Persons Employed at Periods of Em- ployment of <i>Greatest</i> Number	" Range "
1886, . . . . .	1,027	129,843	167,913	38,070
1887, . . . . .	1,027	135,271	172,175	36,904
1887, . . . . .	1,140	149,714	190,194	40,480
1888, . . . . .	1,140	147,593	191,234	43,641
1888, . . . . .	1,364	169,610	221,307	51,697
1889, . . . . .	1,364	176,097	221,449	45,352
1890, . . . . .	3,041	224,887	293,321	68,434
1890, . . . . .	3,041	234,324	300,327	65,903
1890, . . . . .	3,745	251,107	322,288	71,181
1891, . . . . .	3,745	258,771	329,634	70,863
1891, . . . . .	4,473	260,419	335,919	75,500
1892, . . . . .	4,473	271,399	352,939	81,540
1892, . . . . .	4,397	267,168	344,004	76,836
1893, . . . . .	4,397	222,370	345,388	123,018

In this table seven groups appear. The first exhibits a comparison between 1886 and 1887. In those years returns were received from 1,027 establishments, each of which made return for each of the years named. The difference between the number of persons employed at periods of employment of the smallest number, and the number employed at periods of employment of the greatest number in 1886 was 38,070, and in 1887, 36,904. In other words, 38,070 more persons in the aggregate were employed at periods of employment of the greatest number of persons than at the periods of employment of the smallest number in 1886 ; but only 36,904 more persons in 1887. This indicates a narrower range of unemployment in 1887 than in 1886. Applying the same method of comparison to the different periods shown in the table, we find a wider range of unemployment in 1888 than in 1887 ; a narrower range in 1889 than in 1888, in 1890 than in 1889, and in 1891 than in 1890 ; but, on the other hand, a wider range of unemployment is shown in 1892 than in 1891 and in 1893 than in 1892.

In the following table, the numerical aggregates shown in the comparison by groups beginning with 1886 have been reduced to percentages :

COMPARATIVE YEARS.	Number of Establishments Considered	PERCENTAGES		
		Persons Employed at Periods of Employment of Smallest Number of Persons Employed at Periods of Employment of Greatest Number	Range (Unemployed at some time During the Year)	Persons Employed at Periods of Employment of Greatest Number
1886, . . . . .	1,027	77.33	22.67	100.00
1887, . . . . .	1,027	78.57	21.43	100.00
1887, . . . . .	1,140	78.72	21.28	100.00
1888, . . . . .	1,140	77.18	22.82	100.00
1888, . . . . .	1,364	76.64	23.36	100.00
1889, . . . . .	1,364	79.52	20.48	100.00
1889, . . . . .	3,041	76.67	23.33	100.00
1890, . . . . .	3,041	78.05	21.95	100.00
1890, . . . . .	3,745	77.91	22.09	100.00
1891, . . . . .	3,745	78.50	21.50	100.00
1891, . . . . .	4,473	77.52	22.48	100.00
1892, . . . . .	4,473	76.90	23.10	100.00
1892, . . . . .	4,307	77.66	22.34	100.00
1893, . . . . .	4,307	64.36	35.62	100.00

In order that these percentages may have their full effect, let it be borne in mind that if no persons were out of employment at any time during the year, in the establishments making return in the different industries, the percentage of persons employed throughout the year would stand at 100; but, inasmuch as at the periods of employment of the smallest number, less persons are employed than at the periods of employment of the greatest number, the difference between the number of persons employed at these two periods may be represented by a percentage which indicates the number of persons unemployed at some time during the year. This percentage is shown in the table in the third column.

Taking the first line of the table, the percentage indicates that in 1886, 22.67 per cent of the number of persons employed at periods of employment of the greatest number were unemployed, in the establishments making return, at the periods of employment of the smallest number. The corresponding percentage in 1887 was 21.43. The percentage being larger in 1886 than in 1887 indicates that the range of unemployment

was greater in that year. Each of the other periods may be compared in the same way. The least percentage of variation shown in any single year between the number employed at the periods of employment of the greatest number, and the number employed at the periods of employment of the smallest number is found in 1889, this percentage being 20.48. In 1892 the percentage of variation was 23.10, while in 1891 it was 22.48. In 1893, however, the percentage unemployed at some time during the year takes a decided leap from the general average of 22.21 per cent for each of the groups, except the last, to 35.62 per cent, a variation of 13.41 per cent.

The following presentation, brought forward from the table on page 272, exhibits the aggregate number of persons employed in each specified month :

MONTHS.	AGGREGATE NUMBER OF PERSONS EMPLOYED IN EACH SPECIFIED MONTH		AVERAGE NUMBER OF PERSONS EMPLOYED IN EACH ESTABLISHMENT IN EACH SPECIFIED MONTH	
	1892	1893	1892	1893
January, . . . . .	297,195	311,470	68	71
February, . . . . .	301,779	313,494	69	71
March, . . . . .	304,595	316,919	69	72
April, . . . . .	307,881	319,818	70	73
May, . . . . .	307,621	318,638	70	72
June, . . . . .	305,611	310,485	70	71
July, . . . . .	302,158	293,203	69	67
August, . . . . .	303,647	263,874	69	60
September, . . . . .	308,067	248,404	70	56
October, . . . . .	310,813	270,972	71	62
November, . . . . .	311,037	271,409	71	62
December, . . . . .	310,303	272,561	71	62

In this table is shown the aggregate number of persons employed for All Industries during each month of the years specified. It has been found in previous years that, although the percentages of unemployment, as indicated in the table previously presented, may show a rather wide range, no very large variation in the number of persons employed month by month occurs under normal conditions ; this is shown in the average number of persons employed in each establishment in each of the specified months during 1892. This average did not fall below 68 in 1892 nor rise above 71. In 1893, however, a much greater variation appears, the smallest average, 56,

occurring in September, while the highest average was 73 in the month of April. The grand average per establishment was 70 in 1892 and 67 in 1893.

If it be borne in mind that 4,397 establishments enter into the comparison between 1892 and 1893, we shall at once recognize the large number of persons which, in the aggregate, will appear as unemployed if only a slight reduction of the working force is made in each establishment. For instance, the discharge of one person from each of these establishments would not of itself be thought worthy of comment, nor would it be likely to be noticed as an evidence of industrial depression, yet it would mean in the aggregate 4,397 persons unemployed. If ten persons were dropped from the rolls in each establishment, it would carry the aggregate number unemployed to 43,970 persons, yet even the discharge of ten persons from establishments of the capacity of those which enter into these returns would not be thought a large reduction in the number of employes. When it is remembered that these establishments are only a small part of the whole number of establishments engaged in manufactures and mechanical industries in the United States, it at once becomes plain that a very slight industrial depression, if felt throughout the country, would quickly result in the unemployment of possibly 1,000,000 persons, the number which is frequently ascribed to "the army of the unemployed," and that such an army, if in existence at any particular time, would not be indicative of an industrial condition either abnormal or particularly severe, if the unemployment were uniformly distributed over the whole number of establishments. If, however, as at the periods of employment of the smallest number in 1893, the percentage of unemployment rises to 35.62, more than one-third the whole number found at work at the time of employment of the greatest number, and this condition exists over the whole country, the aggregate number unemployed must inevitably be very large, without taking into account the number thrown out in trade, transportation, or other branches of industry, which, of course, suffer whenever manufacturing is depressed.

To bring the range of unemployment as indicated by percentages clearly before the reader, the following table for the nine principal industries and for All Industries is presented :

INDUSTRIES, AND MONTHS.	PERCENTAGES OF EMPLOYMENT DURING THE MONTHS SPECIFIED		PERCENTAGES OF UNEMPLOYMENT DURING THE MONTHS SPECIFIED	
	1892	1893	1892	1893
<i>Boots and Shoes.</i>				
January, . . . . .	92.65	96.65	7.35	3.35
February, . . . . .	94.75	98.15	5.25	1.85
March, . . . . .	95.92	100.00	4.08	-
April, . . . . .	96.32	99.39	3.68	0.61
May, . . . . .	98.03	98.99	1.97	1.01
June, . . . . .	98.24	94.28	1.76	5.72
July, . . . . .	98.01	84.71	1.99	15.29
August, . . . . .	99.95	80.74	0.05	19.26
September, . . . . .	100.00	80.31	-	19.69
October, . . . . .	99.32	80.42	0.68	19.58
November, . . . . .	97.00	79.08	3.00	20.92
December, . . . . .	96.30	80.38	3.70	19.62
<i>Carpetings.</i>				
January, . . . . .	95.09	98.58	4.91	1.42
February, . . . . .	96.10	99.18	3.90	0.82
March, . . . . .	96.81	99.50	3.19	0.50
April, . . . . .	95.60	99.16	4.40	0.84
May, . . . . .	95.15	99.12	4.85	0.88
June, . . . . .	97.41	100.00	2.59	-
July, . . . . .	99.22	98.48	0.78	1.52
August, . . . . .	97.53	73.87	2.47	26.63
September, . . . . .	98.77	87.35	1.23	62.65
October, . . . . .	100.00	71.95	-	28.05
November, . . . . .	94.94	82.73	5.06	17.27
December, . . . . .	94.80	82.89	5.20	17.11
<i>Cotton Goods.</i>				
January, . . . . .	98.09	98.40	1.91	1.60
February, . . . . .	99.44	98.67	0.56	1.33
March, . . . . .	99.58	97.66	0.42	2.34
April, . . . . .	99.81	99.87	0.19	0.13
May, . . . . .	99.61	100.00	0.39	-
June, . . . . .	98.94	99.57	1.06	0.43
July, . . . . .	98.53	99.25	1.47	0.75
August, . . . . .	98.48	84.74	1.52	15.26
September, . . . . .	98.67	77.80	1.33	22.20
October, . . . . .	98.93	94.33	1.07	5.67
November, . . . . .	99.40	95.49	0.60	4.51
December, . . . . .	100.00	95.06	-	4.94
<i>Leather.</i>				
January, . . . . .	87.44	97.87	12.56	2.13
February, . . . . .	90.18	98.40	9.87	1.60
March, . . . . .	94.05	99.80	5.95	0.20
April, . . . . .	93.90	100.00	6.10	-
May, . . . . .	94.59	96.23	5.41	3.77
June, . . . . .	94.79	89.88	5.21	10.12
July, . . . . .	95.06	76.80	4.94	23.20
August, . . . . .	93.64	65.79	6.36	34.21
September, . . . . .	93.23	64.68	6.77	35.32

INDUSTRIES, AND MONTHS.	PERCENTAGES OF EMPLOYMENT DURING THE MONTHS SPECIFIED		PERCENTAGES OF UNEMPLOYMENT DURING THE MONTHS SPECIFIED	
	1892	1893	1892	1893
<i>Leather — Con.</i>				
October, . . . . .	94.69	70.18	5.31	29.82
November, . . . . .	98.09	71.52	1.91	28.48
December, . . . . .	100.00	77.69	-	22.31
<i>Machines and Machinery.</i>				
January, . . . . .	91.85	98.00	8.15	2.00
February, . . . . .	91.71	98.58	8.29	1.42
March, . . . . .	91.15	100.00	8.85	-
April, . . . . .	92.93	97.56	7.07	2.44
May, . . . . .	92.33	97.52	7.67	2.48
June, . . . . .	92.78	94.79	7.22	5.21
July, . . . . .	94.26	91.95	5.74	8.05
August, . . . . .	96.14	84.49	3.86	15.51
September, . . . . .	96.74	78.73	3.26	21.27
October, . . . . .	98.08	77.08	1.92	22.92
November, . . . . .	99.55	75.04	0.45	24.96
December, . . . . .	100.00	74.22	-	25.78
<i>Metals and Metallic Goods.</i>				
January, . . . . .	92.60	97.73	7.40	2.27
February, . . . . .	93.02	97.83	6.98	2.17
March, . . . . .	93.50	99.01	6.50	0.99
April, . . . . .	94.13	100.00	5.87	-
May, . . . . .	95.33	99.92	4.67	0.08
June, . . . . .	95.17	98.20	4.83	1.80
July, . . . . .	93.36	89.49	6.64	10.51
August, . . . . .	94.85	86.30	5.15	13.70
September, . . . . .	96.52	83.10	1.48	16.90
October, . . . . .	100.00	86.13	-	13.87
November, . . . . .	99.31	85.25	0.69	14.75
December, . . . . .	99.77	83.56	0.23	16.44
<i>Paper and Paper Goods.</i>				
January, . . . . .	94.62	98.22	5.38	1.78
February, . . . . .	95.43	98.91	4.57	1.09
March, . . . . .	97.14	99.90	2.86	0.10
April, . . . . .	97.58	100.00	2.42	-
May, . . . . .	97.68	98.62	2.32	1.38
June, . . . . .	98.29	97.76	1.71	2.24
July, . . . . .	98.31	94.96	1.69	5.04
August, . . . . .	97.17	88.89	2.83	11.11
September, . . . . .	98.24	86.00	1.76	14.00
October, . . . . .	100.00	86.83	-	13.17
November, . . . . .	99.78	87.98	0.22	12.02
December, . . . . .	99.77	89.33	0.23	10.67
<i>Woollen Goods.</i>				
January, . . . . .	96.87	96.47	3.13	3.53
February, . . . . .	97.58	99.31	2.42	0.69
March, . . . . .	98.90	100.00	1.10	-
April, . . . . .	99.32	99.83	0.68	0.17

INDUSTRIES, AND MONTHS.	PERCENTAGES OF EMPLOYMENT DURING THE MONTHS SPECIFIED		PERCENTAGES OF UNEMPLOYMENT DURING THE MONTHS SPECIFIED	
	1892	1893	1892	1893
<i>Woollen Goods — Con.</i>				
May, . . . . .	99.12	99.64	0.88	0.36
June, . . . . .	98.67	96.55	1.33	3.45
July, . . . . .	93.36	88.63	6.64	11.37
August, . . . . .	94.14	77.77	5.86	22.23
September, . . . . .	99.24	69.13	0.76	30.87
October, . . . . .	99.92	76.18	0.08	23.82
November, . . . . .	100.00	75.85	—	24.15
December, . . . . .	98.30	82.05	1.70	17.95
<i>Worsted Goods.</i>				
January, . . . . .	90.68	97.02	9.32	2.98
February, . . . . .	90.76	97.64	9.24	2.36
March, . . . . .	92.29	99.37	7.71	0.63
April, . . . . .	92.21	99.70	7.79	0.30
May, . . . . .	92.52	100.00	7.48	—
June, . . . . .	94.07	98.44	5.93	1.56
July, . . . . .	95.33	96.07	4.67	3.93
August, . . . . .	97.85	76.31	2.15	23.69
September, . . . . .	97.99	71.75	2.01	28.25
October, . . . . .	98.68	82.18	1.32	17.82
November, . . . . .	99.62	81.24	0.38	18.76
December, . . . . .	100.00	87.43	—	12.57
<i>ALL INDUSTRIES.</i>				
January, . . . . .	95.55	97.39	4.45	2.61
February, . . . . .	97.02	98.02	2.98	1.98
March, . . . . .	97.93	99.69	2.07	0.31
April, . . . . .	98.99	100.00	1.01	—
May, . . . . .	98.90	99.63	1.10	0.37
June, . . . . .	98.26	97.08	1.74	2.92
July, . . . . .	97.15	91.68	2.85	8.32
August, . . . . .	97.62	82.51	2.38	17.49
September, . . . . .	99.05	77.67	0.95	22.33
October, . . . . .	99.93	84.73	0.07	15.27
November, . . . . .	100.00	84.86	—	15.14
December, . . . . .	99.76	85.22	0.24	14.78

Considering the section devoted to All Industries, in the above table, the number of persons employed in November in 1892 (this being the month of employment of the greatest number in that year) is considered 100 per cent; and the number of persons employed in April in 1893 (this being the month in which the greatest number of persons was employed in that year) is also considered 100 per cent. The percentages of unemployment during the other months are obtained by finding the difference between the percentages of employment appearing each month and 100 per cent. For instance, the



smallest number of persons employed in any month in 1892 was found in the month of January; the number employed in the month of November, as has been explained, constituted 100 per cent; the number employed in the month of January is represented by 95.55 per cent; the percentage of unemployment being the difference between 95.55 and 100 per cent, or 4.45 per cent. On the other hand, the smallest number of persons employed in any single month in 1893 is found in September, the percentage indicating this smallest number being 77.67; the difference between this and 100, namely, 22.33, indicates the percentage of unemployment in that month.

These percentages strikingly illustrate the force of the industrial depression of 1893, and mark the abnormal condition which during the last months of the year affected our industries as compared with the previous year. Let us bear in mind that the base of these percentages of unemployment in each industry is the largest number of persons found employed in any month of the year under consideration. That is, this largest number is considered as the maximum number of employés in the industry. In Boots and Shoes, in 1892, the largest number of persons was employed in the month of September. In the month of January, in that year, 7.35 per cent of this maximum number were out of employment, this being the highest percentage of unemployment reached in that year. On the other hand, in 1893 prior to July, the highest percentage of unemployment is but 5.72, found in the month of June. But in July 15.29 per cent of the maximum number employed in 1893 are found out of employment, and during the remaining months of the year this percentage never falls below 19.26, while in November it rises to 20.92. These high percentages, so long continued, indicate an amount of unemployment in this industry at once abnormal and exceedingly severe in its effect. Substantially the same general condition is to be noted in each of the leading industries. In some of them the percentage of unemployment, frequently less than in Boots and Shoes, has during the last months of 1893 been considerably greater than in that industry.

Take Carpetings as an illustration. In this industry in 1892 the percentage of persons out of employment never rose above 5.20, while during the first half of 1893 employment was very uniform, the maximum appearing in June, and the percentage

of unemployment never rising above 1.52, which is found in the month of July. In August, however, 26.63 per cent of the number reported in June were unemployed. In September, the percentage rose to 62.65, nearly two-thirds of the whole number on the rolls in June, falling back to 28.05 in October and to 17.27 and 17.11, in the months of November and December, respectively.

In Cotton Goods, employment has been found to be remarkably uniform under normal conditions. Seasonal disturbances in this industry are much less marked than in Boots and Shoes. During 1892 the percentage of unemployment did not rise above 1.91, while during six months of that year unemployment did not reach one per cent of the maximum number on the rolls, as returned for the month of December. In March, 1893, the percentage of unemployment was 2.34, but in no other month prior to August did it exceed 1.60; while for four months unemployment did not reach one per cent. In August, however, it rose to 15.26; increasing to 22.20 in September. After September, employment in this industry, unlike any other industry of the selected nine, and unlike the condition obtaining in All Industries considered together, showed a marked improvement, the percentage of unemployment being but 5.67 in October, and but 4.51 and 4.94 in November and December, respectively, indicating an extent of unemployment, which, although large for this industry, as compared with normal conditions, was small considering the unusual industrial depression.

The reader will find it interesting to make similar comparisons for the other industries in this table. It is not necessary to aid him further, except to point out that, considering All Industries represented in these returns, while the number of persons unemployed did not rise above 4.45 per cent of the maximum number on the rolls in 1892, and, except in the single month of January, did not rise above 2.98, continuing at less than one per cent during four consecutive months; and that while during the first six months of 1893 the number unemployed did not exceed 2.92 per cent of the maximum number on the rolls in that year, it rose to 17.49 per cent in August, increased to 22.33 per cent in September, dropped to 15.27 and 15.14 in October and November, respectively, but did not fall below 14.78, the percentage of unemployment found in the month of December. That is, after the close of

July, the number of persons unemployed in All Industries, in the aggregate, continued to be nearly one-sixth of the maximum number on the rolls as returned in April, and in September was nearly one-fourth the maximum number.\*

### RELATIVE PROPORTIONS OF THE SEXES.

The statistical presentations, pages 37 to 48, show the smallest, greatest, and average number of persons employed, and also the range of employment and unemployment as indicated by the excess of greatest over smallest number of persons employed.

For the purpose of showing the relative proportions of the sexes, by percentages, employed in the different industries, the following table is introduced:

INDUSTRIES.	PERCENTAGES					
	NUMBER OF PERSONS EMPLOYED DURING THE YEAR: BY SEX					
	1885		1892		1902	
	Males	Females	Males	Females	Males	Females
Agricultural implements, . . . . .	100.00	-	100.00	-	100.00	-
Arms and ammunition, . . . . .	92.16	7.84	91.99	8.01	91.19	8.81
Artisans' tools, . . . . .	96.69	3.31	96.57	3.43	96.81	3.19
Awnings, sails, tents, etc., . . . . .	51.14	48.86	79.80	20.20	82.45	17.55
Boots and shoes, . . . . .	69.46	30.54	70.17	29.83	69.47	30.53
Boxes (paper and wooden), . . . . .	55.62	44.38	58.24	41.76	58.27	41.73
Brick, tiles, and sewer pipe, . . . . .	99.09	0.91	99.75	0.25	99.66	0.35
Brooms, brushes, and mops, . . . . .	62.32	37.68	51.34	48.66	51.55	48.45
Burial cases, caskets, coffins, etc., . . . . .	85.51	14.49	84.96	15.04	83.03	11.97
Buttons and dress trimmings, . . . . .	30.15	69.85	31.34	68.66	37.06	62.94
Carpetings, . . . . .	42.12	57.88	45.82	54.18	44.91	55.09
Carriages and wagons, . . . . .	98.71	1.29	99.83	0.17	99.73	0.27
Cement, kaolin, lime, and plaster, . . . . .	100.00	-	100.00	-	100.00	-
Chemical preparations (compounded), . . . . .	97.89	2.11	98.94	1.06	99.67	0.33
Clocks, watches, and jewelry, . . . . .	60.66	39.34	73.91	26.09	74.45	25.55
Clothing, . . . . .	28.25	71.75	31.94	68.06	28.91	71.09
Cooking, lighting, and heating apparatus, . . . . .	98.68	1.32	100.00	-	100.00	-
Cordage and twine, . . . . .	53.21	46.79	58.87	41.13	58.46	41.54
Corks, bungs, and taps, . . . . .	63.29	36.71	86.79	13.21	80.83	19.17
Cotton goods, . . . . .	44.96	55.04	47.80	52.20	48.23	51.77
Cotton, woollen, and other textiles, . . . . .	50.54	49.46	47.17	52.83	46.62	53.38
Crayons, pencils, crucibles, etc., . . . . .	85.11	14.89	100.00	-	100.00	-
Drugs and medicines, . . . . .	71.17	28.83	52.77	47.23	53.84	46.16
Dyestuffs, . . . . .	96.20	3.80	99.69	0.31	99.03	0.97
Earthen, plaster, and stone ware, . . . . .	92.57	7.43	89.89	10.11	89.00	11.00
Electrical apparatus and appliances, . . . . .	98.74	1.26	90.65	9.35	92.55	7.45
Electroplating, . . . . .	97.12	2.88	95.70	4.30	93.64	6.36

\* The question of Unemployment in Massachusetts, together with methods of dealing with the unemployed under various plans in operation abroad, is considered at length in a special report on the subject forming Part I. of the Report of the Bureau of Statistics of Labor for the year 1893.

INDUSTRIES.	PERCENTAGES					
	NUMBER OF PERSONS EMPLOYED DURING THE YEAR: BY SEX					
	1885		1892		1898	
	Males	Females	Males	Females	Males	Females
Emery and sand paper and cloth, etc., .	98.69	6.31	96.48	3.52	96.44	3.56
Fancy articles, etc., . . . . .	49.09	50.91	29.48	70.52	28.63	71.37
Fertilizers, . . . . .	99.88	0.62	100.00	-	100.00	-
Fine arts and taxidermy, . . . . .	77.78	22.22	77.87	22.63	86.81	13.19
Flax, hemp, jute, and linen goods, . .	51.57	48.43	53.78	46.22	51.67	48.33
Food preparations, . . . . .	82.28	17.72	77.64	22.36	78.38	21.62
Furniture, . . . . .	91.00	9.00	89.67	10.33	89.06	10.94
Glass, . . . . .	88.70	11.30	93.76	6.24	94.13	5.87
Glue, isinglass, and starch, . . . . .	96.13	3.87	90.04	9.96	90.79	9.21
Hair work (animal and human), . . . .	38.94	61.06	47.77	52.23	48.24	51.76
Hose: rubber, linen, etc., . . . . .	78.18	21.82	81.46	18.54	83.55	16.45
Hosiery and knit goods, . . . . .	29.13	70.87	27.50	72.50	27.25	72.75
Ink, mucilage, and paste, . . . . .	82.26	17.74	56.69	43.31	58.10	41.90
Ivory, bone, shell, and horn goods, etc.,	91.09	8.91	88.76	11.25	88.96	11.04
Leather, . . . . .	97.85	2.15	96.89	3.11	96.95	3.05
Liquors and beverages (not spirituous), .	96.74	3.26	99.87	0.13	100.00	-
Liquors: malt, distilled, and fermented, .	99.61	0.39	99.94	0.06	99.95	0.05
Lumber, . . . . .	99.74	0.26	98.69	1.31	98.96	1.04
Machines and machinery, . . . . .	98.57	1.43	98.57	1.43	98.55	1.45
Metals and metallic goods, . . . . .	90.95	9.05	89.61	10.39	90.41	9.59
Mixed textiles, . . . . .	54.67	45.33	70.63	29.37	72.38	27.62
Models, lasts, and patterns, . . . . .	91.02	8.98	100.00	-	99.90	0.10
Musical instruments and materials, . . .	98.10	1.90	96.55	3.45	96.73	3.27
Oils and illuminating fluids, . . . . .	96.83	3.17	84.42	15.51	90.93	9.07
Paints, colors, and crude chemicals, . .	97.31	2.69	96.79	3.21	96.71	3.29
Paper and paper goods, . . . . .	56.08	43.92	54.07	45.93	54.79	45.21
Perfumes, toilet articles, etc., . . . .	51.06	48.94	37.99	62.01	40.89	59.11
Photographs and photographic materials, .	56.89	43.11	58.28	41.72	59.21	40.79
Polishes and dressing, . . . . .	64.81	35.19	53.93	46.02	53.42	46.58
Printing, publishing, and bookbinding, .	72.40	27.60	69.72	30.28	69.58	30.42
Print works, dye works, and bleacheries, .	65.17	34.83	78.40	21.60	78.86	21.14
Railroad construction and equipment, . .	99.22	0.78	100.00	-	99.32	0.68
Rubber and elastic goods, . . . . .	58.22	41.78	55.76	44.24	54.30	45.70
Saddlery and harness, . . . . .	-	-	90.78	9.22	91.92	8.08
Scientific instruments and appliances, . .	82.84	17.16	87.59	12.41	86.87	13.13
Shipbuilding, . . . . .	99.35	0.65	100.00	-	100.00	-
Silk and silk goods, . . . . .	29.73	70.27	30.33	69.67	30.92	69.08
Sporting and athletic goods, . . . . .	85.09	14.91	87.51	12.49	90.94	9.06
Stone, . . . . .	99.93	0.07	100.00	-	100.00	-
Straw and palm leaf goods, . . . . .	36.07	63.93	37.27	62.73	36.93	63.07
Tallow, candles, soap, and grease, . . .	93.73	6.27	85.09	14.91	87.39	12.61
Tobacco, snuff, and cigars, . . . . .	69.85	30.15	68.09	31.91	69.80	30.20
Toys and games (children's), . . . . .	82.46	17.54	81.36	18.64	80.99	19.01
Trunks and valises, . . . . .	94.44	5.56	91.70	8.30	91.48	8.52
Whips, lashes, and stocks, . . . . .	64.41	35.59	67.28	32.72	65.64	34.36
Wooden goods, . . . . .	95.31	4.69	97.82	2.18	97.41	2.59
Woollen goods, . . . . .	61.60	38.40	63.06	36.94	63.54	36.46
Worsted goods, . . . . .	42.13	57.87	49.88	50.12	52.36	47.64
ALL INDUSTRIES, . . . . .	67.00	33.00	66.30	33.70	66.31	33.69

This table shows the percentages of males and females in the different industries as determined in the State Census of 1885 and also similar percentages derived from the returns made in 1892 and in 1893. In computing the percentages for the last named years, a total for each year was first obtained by aggregating, for the different industries, the number of persons of each sex employed month by month. In Agricultural Implements and in some other industries no females were employed in one or more of the years considered in the table.

The only industries in which material differences in the relative proportions of the sexes appear, in 1892 and 1893, as compared with the returns of the Census for 1885 are, Awnings, Sails, Tents, etc.; Corks, Bungs, and Taps; Crayons, Pencils, Crucibles, etc.; Drugs and Medicines; Fancy Articles, etc.; Ink, Mucilage, and Paste; Mixed Textiles; Oils and Illuminating Fluids; Perfumes, Toilet Articles, etc.; Polishes and Dressing; and Print Works, Dye Works, and Bleacheries. These industries are, none of them, among the large industries of the State, and some of them include a wide variety of articles brought together under the same industry head by the system of general classification necessarily employed in the Census. This accounts for the difference in the relative proportions of the sexes observed in the table, inasmuch as the returns in the Census include all establishments classed under the industry head, while the returns in 1892 and 1893 include only the more important establishments. It will be noticed that a statement of persons employed in 1885 does not occur against the industry Saddlery and Harness; this is owing to the fact that this industry was not separately presented in that year, the returns having been included under the general classification of Leather.

The percentages derived from the Census of 1885 have no particular bearing upon the different elements embodied in the returns for 1892 and 1893, and are simply introduced here for purposes of comparison. The other percentages, however, should be considered in connection with the subject of wages, since a large proportion of female employes in any industry affects the average rate of wages, and frequently accounts for a low average wage prevailing in certain industries as compared with others. A comparison of the percentages for the years

1892 and 1893, as they are obtained from returns made by the same establishments in each year, will indicate the changes that have taken place in the relative proportions of the sexes. These changes are shown graphically in the following table, in which increase in percentages of females employed is indicated by the sign (+) and decrease by the sign (—) :

INDUSTRIES.	INCREASE (+), OR DECREASE (—), IN PERCENTAGES OF FEMALES EMPLOYED IN —		
	1892 as Com- pared with 1885	1892 as Com- pared with 1885	1892 as Com- pared with 1893
Agricultural implements, . . . . .	*	*	*
Arms and ammunition, . . . . .	+	+	+
Artisans' tools, . . . . .	+	—	—
Awnings, sails, tents, etc., . . . . .	—	—	—
Boots and shoes, . . . . .	—	—	+
Boxes (paper and wooden), . . . . .	—	—	—
Brick, tiles, and sewer pipe, . . . . .	—	—	+
Brooms, brushes, and mops, . . . . .	+	+	—
Burial cases, caskets, coffins, etc., . . . . .	+	—	—
Buttons and dress trimmings, . . . . .	—	—	—
Carpetings, . . . . .	—	—	+
Carriages and wagons, . . . . .	—	—	+
Cement, kaolin, lime, and plaster, . . . . .	*	*	*
Chemical preparations (compounded), . . . . .	—	—	—
Clocks, watches, and jewelry, . . . . .	—	—	—
Clothing, . . . . .	—	—	+
Cooking, lighting, and heating apparatus, . . . . .	—	—	*
Cordage and twine, . . . . .	—	—	+
Corks, bungs, and taps, . . . . .	—	—	+
Cotton goods, . . . . .	—	—	—
Cotton, woollen, and other textiles, . . . . .	+	+	+
Crayons, pencils, crucibles, etc., . . . . .	—	—	*
Drugs and medicines, . . . . .	+	+	—
Dyestuffs, . . . . .	—	—	+
Earthen, plaster, and stone ware, . . . . .	+	+	+
Electrical apparatus and appliances, . . . . .	+	+	—
Electroplating, . . . . .	+	+	+
Emery and sand paper and cloth, etc., . . . . .	—	—	+
Fancy articles, etc., . . . . .	+	+	+
Fertilizers, . . . . .	—	—	*
Fine arts and taxidermy, . . . . .	+	—	—
Flax, hemp, jute, and linen goods, . . . . .	—	—	+
Food preparations, . . . . .	+	+	—
Furniture, . . . . .	+	+	+
Glass, . . . . .	—	—	—
Glue, isinglass, and starch, . . . . .	+	+	—
Hair work (animal and human), . . . . .	—	—	—
Hose : rubber, linen, etc., . . . . .	—	—	—
Hosiery and knit goods, . . . . .	+	+	+
Ink, mucilage, and paste, . . . . .	+	+	—

\* No females employed.

INDUSTRIES.	INCREASE (+), OR DECREASE (—), IN PERCENTAGES OF FEMALES EMPLOYED IN—		
	1893 as Com- pared with 1885	1893 as Com- pared with 1885	1893 as Com- pared with 1892
Ivory, bone, shell, and horn goods, etc., . . .	+	+	—
Leather, . . . . .	+	+	—
Liquors and beverages (not spirituous), . . .	—	—	—
Liquors: malt, distilled, and fermented, . . .	—	—	—
Lumber, . . . . .	+	+	—
Machines and machinery, . . . . .	=	+	+
Metals and metallic goods, . . . . .	+	+	—
Mixed textiles, . . . . .	—	—	—
Models, lasts, and patterns, . . . . .	—	—	+
Musical instruments and materials, . . . . .	+	+	—
Oils and illuminating fluids, . . . . .	+	+	—
Paints, colors, and crude chemicals, . . . . .	+	+	+
Paper and paper goods, . . . . .	+	+	—
Perfumes, toilet articles, etc., . . . . .	+	+	—
Photographs and photographic materials, . . .	—	—	—
Pollishes and dressing, . . . . .	+	+	+
Printing, publishing, and bookbinding, . . .	+	+	+
Print works, dye works, and bleacheries, . . .	—	—	—
Railroad construction and equipment, . . .	—	—	+
Rubber and elastic goods, . . . . .	+	+	+
Saddlery and harness, . . . . .	+	+	—
Scientific instruments and appliances, . . .	—	—	+
Shipbuilding, . . . . .	—	—	†
Silk and silk goods, . . . . .	—	—	—
Sporting and athletic goods, . . . . .	—	—	—
Stone, . . . . .	—	—	†
Straw and palm leaf goods, . . . . .	—	—	+
Tallow, candles, soap, and grease, . . . . .	+	+	—
Tobacco, snuff, and cigars, . . . . .	+	+	—
Toys and games (children's), . . . . .	+	+	+
Trunks and valises, . . . . .	+	+	+
Whips, lashes, and stocks, . . . . .	—	—	+
Wooden goods, . . . . .	—	—	+
Woollen goods, . . . . .	—	—	—
Worsted goods, . . . . .	—	—	—
ALL INDUSTRIES, . . . . .	+	+	—

\* No change in percentage of females employed.      † No females employed.

The following industries, 30 in number, show an increase in the percentage of females employed in 1893 as compared with 1892 :

- Arms and Ammunition.  
Boots and Shoes.  
Brick, Tiles, and Sewer Pipe.  
Carpetings.
- Carriages and Wagons.  
Clothing.  
Cordage and Twine.  
Corks, Bungs, and Taps.



Cotton, Woollen, and Other Textiles.  
 Dyestuffs.  
 Earthen, Plaster, and Stone Ware.  
 Electroplating.  
 Emery and Sand Paper and Cloth,  
 etc.  
 Fancy Articles, etc.  
 Flax, Hemp, Jute, and Linen Goods.  
 Furniture.  
 Hosiery and Knit Goods.  
 Machines and Machinery.  
 Models, Lasts, and Patterns.  
 Paints, Colors, and Crude Chemicals.

Polishes and Dressing.  
 Printing, Publishing, and Bookbind-  
 ing.  
 Railroad Construction and Equip-  
 ment.  
 Rubber and Elastic Goods.  
 Scientific Instruments and Appli-  
 ances.  
 Straw and Palm Leaf Goods.  
 Toys and Games (Children's).  
 Trunks and Valises.  
 Whips, Lashes, and Stocks.  
 Wooden Goods.

The following industries, 38 in number, show a decrease in the percentage of females employed in 1893 as compared with 1892 :

Artisans' Tools.  
 Awnings, Sails, Tents, etc.  
 Boxes (Paper and Wooden).  
 Brooms, Brushes, and Mops.  
 Burial Cases, Caskets, Coffins, etc.  
 Buttons and Dress Trimmings.  
 Chemical Preparations (Compound-  
 ed).  
 Clocks, Watches, and Jewelry.  
 Cotton Goods.  
 Drugs and Medicines.  
 Electrical Apparatus and Appliances.  
 Fine Arts and Taxidermy.  
 Food Preparations.  
 Glass.  
 Glue, Isinglass, and Starch.  
 Hair Work (Animal and Human).  
 Hose : Rubber, Linen, etc.  
 Ink, Mucilage, and Paste.  
 Ivory, Bone, Shell, and Horn Goods,  
 etc.  
 Leather.

Liquors and Beverages (Not Spirit-  
 uous).  
 Liquors : Malt, Distilled, and Fer-  
 mented.  
 Lumber.  
 Metals and Metallic Goods.  
 Mixed Textiles.  
 Musical Instruments and Materials.  
 Oils and Illuminating Fluid.  
 Paper and Paper Goods.  
 Perfumes, Toilet Articles, etc.  
 Photographs and Photographic Ma-  
 terials.  
 Print Works, Dye Works, and Bleach-  
 eries.  
 Saddlery and Harness.  
 Silk and Silk Goods.  
 Sporting and Athletic Goods.  
 Tallow, Candles, Soap, and Grease.  
 Tobacco, Snuff, and Cigars.  
 Woollen Goods.  
 Worsted Goods.

In 1892 and 1893 males only were employed in Agricultural Implements ; Cement, Kaolin, Lime, and Plaster ; Cooking, Lighting, and Heating Apparatus ; Crayons, Pencils, Crucibles, etc. ; Fertilizers ; Shipbuilding ; and Stone. In two industries, Models, Lasts, and Patterns and Railroad Construction and Equipment, no females were employed in 1892 ; but a small percentage of female employes is shown in 1893,



INDUSTRIES.	INCREASE (+), OR DECREASE (-), IN PERCENTAGES OF FEMALES EMPLOYED IN—		
	1892 as Com- pared with 1885	1893 as Com- pared with 1885	1893 as Com- pared with 1892
Ivory, bone, shell, and horn goods, etc., . . .	+	+	—
Leather, . . . . .	+	+	—
Liquors and beverages (not spirituous), . . .	—	—	—
Liquors: malt, distilled, and fermented, . . .	—	—	—
Lumber, . . . . .	+	+	—
Machines and machinery, . . . . .	=	+	+
Metals and metallic goods, . . . . .	+	+	—
Mixed textiles, . . . . .	—	—	—
Models, lasts, and patterns, . . . . .	—	—	+
Musical instruments and materials, . . . . .	+	+	—
Oils and illuminating fluids, . . . . .	+	+	—
Paints, colors, and crude chemicals, . . . . .	+	+	+
Paper and paper goods, . . . . .	+	+	—
Perfumes, toilet articles, etc., . . . . .	+	+	—
Photographs and photographic materials, . . .	—	—	—
Polishes and dressing, . . . . .	+	+	+
Printing, publishing, and bookbinding, . . .	+	+	+
Print works, dye works, and bleacheries, . . .	—	—	—
Railroad construction and equipment, . . .	—	—	+
Rubber and elastic goods, . . . . .	+	+	+
Saddlery and harness, . . . . .	+	+	—
Scientific instruments and appliances, . . .	—	—	+
Shipbuilding, . . . . .	—	—	†
Silk and silk goods, . . . . .	—	—	—
Sporting and athletic goods, . . . . .	—	—	—
Stone, . . . . .	—	—	†
Straw and palm leaf goods, . . . . .	—	—	+
Tallow, candles, soap, and grease, . . . . .	+	+	—
Tobacco, snuff, and cigars, . . . . .	+	+	—
Toys and games (children's), . . . . .	+	+	+
Trunks and valises, . . . . .	+	+	+
Whips, lashes, and stocks, . . . . .	—	—	+
Wooden goods, . . . . .	—	—	+
Woollen goods, . . . . .	—	—	—
Worsted goods, . . . . .	—	—	—
ALL INDUSTRIES, . . . . .	+	+	—

\* No change in percentage of females employed.      † No females employed.

The following industries, 30 in number, show an increase in the percentage of females employed in 1893 as compared with 1892 :

- Arms and Ammunition.  
Boots and Shoes.  
Brick, Tiles, and Sewer Pipe.  
Carpetings.
- Carriages and Wagons.  
Clothing.  
Cordage and Twine.  
Corks, Bungs, and Taps.

Cotton, Woollen, and Other Textiles.	Polishes and Dressing.
Dyestuffs.	Printing, Publishing, and Bookbinding.
Earthen, Plaster, and Stone Ware.	Railroad Construction and Equipment.
Electroplating.	Rubber and Elastic Goods.
Emery and Sand Paper and Cloth, etc.	Scientific Instruments and Appliances.
Fancy Articles, etc.	Straw and Palm Leaf Goods.
Flax, Hemp, Jute, and Linen Goods.	Toys and Games (Children's).
Furniture.	Trunks and Valises.
Hosiery and Knit Goods.	Whips, Lashes, and Stocks.
Machines and Machinery.	Wooden Goods.
Models, Lasts, and Patterns.	
Paints, Colors, and Crude Chemicals.	

The following industries, 38 in number, show a decrease in the percentage of females employed in 1893 as compared with 1892 :

Artisans' Tools.	Liquors and Beverages (Not Spirituous).
Awnings, Sails, Tents, etc.	Liquors: Malt, Distilled, and Fermented.
Boxes (Paper and Wooden).	Lumber.
Brooms, Brushes, and Mops.	Metals and Metallic Goods.
Burial Cases, Caskets, Coffins, etc.	Mixed Textiles.
Buttons and Dress Trimmings.	Musical Instruments and Materials.
Chemical Preparations (Compound- ed).	Oils and Illuminating Fluid.
Clocks, Watches, and Jewelry.	Paper and Paper Goods.
Cotton Goods.	Perfumes, Toilet Articles, etc.
Drugs and Medicines.	Photographs and Photographic Materials.
Electrical Apparatus and Appliances.	Print Works, Dye Works, and Bleacheries.
Fine Arts and Taxidermy.	Saddlery and Harness.
Food Preparations.	Silk and Silk Goods.
Glass.	Sporting and Athletic Goods.
Glue, Isinglass, and Starch.	Tallow, Candles, Soap, and Grease.
Hair Work (Animal and Human).	Tobacco, Snuff, and Cigars.
Hose: Rubber, Linen, etc.	Woollen Goods.
Ink, Mucilage, and Paste.	Worsted Goods.
Ivory, Bone, Shell, and Horn Goods, etc.	
Leather.	

In 1892 and 1893 males only were employed in Agricultural Implements; Cement, Kaolin, Lime, and Plaster; Cooking, Lighting, and Heating Apparatus; Crayons, Pencils, Crucibles, etc.; Fertilizers; Shipbuilding; and Stone. In two industries, Models, Lasts, and Patterns and Railroad Construction and Equipment, no females were employed in 1892; but a small percentage of female employes is shown in 1893,

this percentage in the first named industry being 0.10, and in the second 0.68. In 1893 the percentage of female employes decreased in each of the leading textile industries: Cotton Goods, Woollen Goods, and Worsted Goods, the variation being 0.43, 0.48, and 2.48 respectively.

	INDUSTRIES.	Whole Number of Establishments Considered
1	Agricultural implements, . . . . .	11
2	Arms and ammunition, . . . . .	13
3	Artisans' tools, . . . . .	65
4	Awnings, sails, tents, etc., . . . . .	39
5	Boots and shoes, . . . . .	712
6	Boxes (paper and wooden), . . . . .	136
7	Brick, tiles, and sewer pipe, . . . . .	49
8	Brooms, brushes, and mops, . . . . .	21
9	Burial cases, caskets, coffins, etc., . . . . .	6
10	Buttons and dress trimmings, . . . . .	19
11	Carpetings, . . . . .	11
12	Carriages and wagons, . . . . .	132
13	Cement, kaolin, lime, and plaster, . . . . .	7
14	Chemical preparations (compounded), . . . . .	10
15	Clocks, watches, and jewelry, . . . . .	97
16	Clothing, . . . . .	135
17	Cooking, lighting, and heating apparatus, . . . . .	36
18	Cordage and twine, . . . . .	27
19	Corks, bungs, and taps, . . . . .	3
20	Cotton goods, . . . . .	149
21	Cotton, woollen, and other textiles, . . . . .	3
22	Crayons, pencils, crucibles, etc., . . . . .	3
23	Drugs and medicines, . . . . .	23
24	Dyestuffs, . . . . .	5
25	Earthen, plaster, and stone ware, . . . . .	7
26	Electrical apparatus and appliances, . . . . .	15
27	Electroplating, . . . . .	9
28	Emery and sand paper and cloth, etc., . . . . .	10
29	Fancy articles, etc., . . . . .	5
30	Fertilizers, . . . . .	5
31	Fine arts and taxidermy, . . . . .	3
32	Flax, hemp, jute, and linen goods, . . . . .	7
33	Food preparations, . . . . .	300
34	Furniture, . . . . .	121
35	Glass, . . . . .	8
36	Glue, isinglass, and starch, . . . . .	18
37	Hair work (animal and human), . . . . .	9
38	Hose: rubber, linen, etc., . . . . .	3
39	Hosiery and knit goods, . . . . .	42
40	Ink, mucilage, and paste, . . . . .	9
41	Ivory, bone, shell, and horn goods, etc., . . . . .	10
42	Leather, . . . . .	148

In some of the industries certain establishments reported the same number of persons employed during the entire year. The statistics upon this point are brought forward in the following table from the Industry Presentations, pages 61 to 274 :

1892				1893				
Number of Establishments Reporting the Same Number of Persons Employed During the Entire Year	NUMBER OF PERSONS EMPLOYED DURING THE ENTIRE YEAR			Number of Establishments Reporting the Same Number of Persons Employed During the Entire Year	NUMBER OF PERSONS EMPLOYED DURING THE ENTIRE YEAR			
	Males	Females	Total		Males	Females	Total	
-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	2
20	127	2	129	11	42	-	42	3
5	27	11	38	2	17	10	27	4
204	6,319	2,647	8,966	100	2,591	1,105	3,696	5
26	256	296	552	19	208	169	377	6
3	94	-	94	2	38	-	38	7
8	259	198	457	6	251	196	447	8
4	136	25	161	3	33	4	37	9
4	18	27	45	-	-	-	-	10
-	-	-	-	1	12	-	12	11
23	297	-	297	14	117	-	117	12
5	13	-	13	3	8	-	8	13
5	28	-	28	6	13	1	14	14
21	343	108	451	12	201	112	313	15
40	714	1,352	2,066	24	266	309	575	16
5	365	-	365	3	82	-	82	17
4	23	46	69	1	1	-	1	18
1	15	-	15	-	-	-	-	19
37	8,906	3,452	17,358	20	5,561	5,318	10,879	20
-	-	-	-	-	-	-	-	21
1	12	-	12	1	12	-	12	22
8	29	18	47	10	39	19	58	23
-	-	-	-	-	-	-	-	24
2	83	14	97	-	-	-	-	25
4	52	1	53	3	24	-	24	26
4	16	-	16	2	5	-	5	27
3	60	-	60	-	-	-	-	28
2	13	43	56	-	-	-	-	29
1	13	-	13	2	8	-	8	30
-	-	-	-	-	-	-	-	31
1	6	2	8	-	-	-	-	32
129	744	111	855	123	712	135	847	33
30	683	53	736	18	350	5	355	34
-	-	-	-	1	18	-	18	35
1	7	-	7	1	6	-	6	36
4	3	31	34	3	2	8	10	37
-	-	-	-	-	-	-	-	38
2	5	53	58	4	14	16	30	39
5	11	1	12	5	13	1	14	40
1	2	2	4	1	2	2	4	41
27	474	1	475	7	117	1	118	42

	INDUSTRIES.	Whole Number of Establishments Considered
1	Liquors and beverages (not spirituous), . . . . .	23
2	Liquors: malt, distilled, and fermented, . . . . .	53
3	Lumber, . . . . .	21
4	Machines and machinery, . . . . .	335
5	Metals and metallic goods, . . . . .	341
6	Mixed textiles, . . . . .	13
7	Models, lasts, and patterns, . . . . .	46
8	Musical instruments and materials, . . . . .	54
9	Oils and illuminating fluids, . . . . .	10
10	Paints, colors, and crude chemicals, . . . . .	20
11	Paper and paper goods, . . . . .	98
12	Perfumes, toilet articles, etc., . . . . .	5
13	Photographs and photographic materials, . . . . .	17
14	Pollaxes and dressing, . . . . .	29
15	Printing, publishing, and bookbinding, . . . . .	24
16	Print works, dye works, and bleacheries, . . . . .	44
17	Railroad construction and equipment, . . . . .	14
18	Rubber and elastic goods, . . . . .	34
19	Saddlery and harness, . . . . .	38
20	Scientific instruments and appliances, . . . . .	15
21	Shipbuilding, . . . . .	56
22	Silk and silk goods, . . . . .	12
23	Sporting and athletic goods, . . . . .	7
24	Stone, . . . . .	175
25	Straw and palm leaf goods, . . . . .	20
26	Tallow, candles, soap, and grease, . . . . .	62
27	Tobacco, snuff, and cigars, . . . . .	42
28	Toys and games (children's), . . . . .	8
29	Trunks and valises, . . . . .	7
30	Whips, lashes, and stocks, . . . . .	10
31	Wooden goods, . . . . .	168
32	Woollen goods, . . . . .	125
33	Worsted goods, . . . . .	20
34	ALL INDUSTRIES, . . . . .	4,397

The final line of the table relates to All Industries. Of the 4,397 establishments making return, 1,087, or 24.72 per cent, in 1892, and 702, or 15.97 per cent, in 1893 reported that the same number of persons was employed by them throughout the year; that is to say, the number did not vary from month to month, or, more properly speaking, that while precisely the same individuals may not have been employed during the entire year, the number of persons continuously employed was kept up to a certain figure, implying that if any were discharged or gave up their places others were substituted in the places

1892				1892				
Number of Establishments Reporting the Same Number of Persons Employed during the Entire Year	NUMBER OF PERSONS EMPLOYED DURING THE ENTIRE YEAR			Number of Establishments Reporting the Same Number of Persons Employed During the Entire Year	NUMBER OF PERSONS EMPLOYED DURING THE ENTIRE YEAR			
	Males	Females	Total		Males	Females	Total	
4	15	-	15	3	10	-	10	1
12	240	-	240	12	195	-	195	2
3	19	-	19	2	74	-	74	3
73	1,080	51	1,131	35	506	3	509	4
83	1,751	325	2,076	63	1,420	250	1,650	5
8	129	10	139	2	119	12	131	6
15	134	-	134	5	55	-	55	7
16	1,040	8	1,048	13	624	8	632	8
2	17	3	20	2	20	1	21	9
8	45	-	45	7	46	-	46	10
20	912	622	1,534	7	303	148	451	11
2	5	12	17	2	5	9	14	12
8	15	11	26	7	13	10	23	13
13	67	9	76	13	62	7	69	14
9	191	89	280	7	70	32	102	15
6	31	17	48	5	28	18	46	16
-	-	-	-	-	-	-	-	17
7	117	263	380	2	31	-	31	18
23	83	5	93	17	52	-	52	19
4	7	2	9	4	7	2	9	20
10	74	-	74	7	38	-	38	21
2	10	43	53	-	-	-	-	22
3	87	24	111	1	2	-	2	23
14	298	-	298	13	386	-	386	24
-	-	-	-	-	-	-	-	25
26	94	4	98	24	89	1	90	26
5	34	13	47	4	13	1	14	27
-	-	-	-	-	-	-	-	28
4	30	-	30	2	13	-	13	29
3	32	17	49	1	4	2	6	30
42	387	-	387	24	164	-	164	31
23	1,154	790	1,944	10	634	348	982	32
-	-	-	-	-	-	-	-	33
1,087	28,256	15,812	44,068	702	15,746	8,243	23,989	34

thus made vacant. The number of establishments reporting the same number of persons employed decreased in '1893, as compared with 1892, 385, or 35.42 per cent. The number of persons thus continuously employed during the entire year in these establishments in 1892 was 44,068 and in 1893, 23,989, a decrease in the latter year of 20,079 or 45.56 per cent. These persons constituted 14.39 per cent of the aggregate average number of persons employed in all the establishments making return in 1892 and 8.18 per cent in 1893.

## WAGES PAID: BY INDUSTRIES.

The statistical presentations under this subject comprise two tables, pages 49 to 54. The first table relates to the total amount paid in wages by the 4,397 establishments during the years 1892 and 1893, and the second to the average yearly earnings of each of the employes in these same establishments during the years specified.

## WAGES PAID.

The facts relating to the total amount of wages paid are given on pages 50 and 51. In the following table are brought forward the figures for the nine leading industries:

INDUSTRIES.	Number of Estab- lishments Con- sidered	TOTAL AMOUNT PAID IN WAGES DURING THE YEAR		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Boots and shoes, . . . .	712	\$25,533,508	\$22,618,569	—\$2,914,939	—11.42
Carpetings, . . . .	11	1,823,229	1,589,019	—234,210	—12.85
Cotton goods, . . . .	149	25,515,747	25,268,510	—247,237	—0.97
Leather, . . . .	148	8,003,501	2,748,051	—5,255,450	—65.51
Machines and machinery, . .	335	10,107,731	9,470,094	—637,637	—6.31
Metals and metallic goods, . .	341	7,424,150	6,726,827	—697,323	—9.39
Paper and paper goods, . . .	98	4,269,230	3,957,802	—311,428	—7.29
Woollen goods, . . . .	125	6,661,065	5,883,015	—778,070	—11.68
Worsted goods, . . . .	20	3,321,837	2,202,796	—1,119,041	—33.69
Other industries, . . . .	2,458	50,312,483	46,821,714	—3,490,769	—6.94
ALL INDUSTRIES, . . . .	4,397	\$137,972,501	\$127,286,397	—\$10,686,104	—7.75

The final line of this table reproduces the figures for All Industries. In the 4,397 establishments making return, the total amount paid in wages during the year 1892 was \$137,972,501 and in 1893, \$127,286,397, a loss of \$10,686,104, or 7.75 per cent. Of the nine leading industries, the greatest percentage of decrease, namely, 33.69 per cent, is found in Worsted Goods; Carpetings comes next with a loss of 12.85 per cent, while next follow Woollen Goods, the loss being 11.68 per cent, and Boots and Shoes, the loss being 11.42 per cent. In Metals and Metallic Goods, Paper and Paper Goods,

and Machines and Machinery, the percentages of loss are 9.39, 7.29, and 6.31, respectively. Cotton Goods shows the slight decrease of but 0.97 per cent. In industries other than the nine mentioned in detail, the aggregate loss was 6.94 per cent. It will be noticed that all the industries in the above list, with the exception of Cotton Goods, Machines and Machinery, and Paper and Paper Goods, show a percentage of decrease greater than that shown for All Industries.

### AVERAGE YEARLY EARNINGS.

The average yearly earnings in the nine leading industries are brought forward in the following table from the presentation on pages 52 and 53, the decrease in 1893 as compared with 1892 being given in amounts and percentages:

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGE YEARLY EARNINGS		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Amounts	Percent- ages
Boots and shoes, . . . . .	712	\$522.60	\$498.33	—\$24.27	—4.64
Carpetings, . . . . .	11	387.67	366.56	—21.11	—5.43
Cotton goods, . . . . .	149	345.99	343.60	—2.39	—0.69
Leather, . . . . .	148	507.52	490.55	—16.97	—3.34
Machines and machinery, . . . . .	335	502.20	541.30	—20.90	—3.72
Metals and metallic goods, . . . . .	341	517.15	505.28	—11.87	—2.30
Paper and paper goods, . . . . .	98	423.32	409.80	—13.52	—3.19
Woollen goods, . . . . .	125	389.54	371.00	—18.54	—4.76
Worsted goods, . . . . .	20	369.26	244.08	—125.18	—33.90
Other industries, . . . . .	2,458	481.65	473.16	—8.49	—1.76
<b>ALL INDUSTRIES, . . . . .</b>	<b>4,397</b>	<b>\$450.59</b>	<b>\$434.17</b>	<b>—\$16.42</b>	<b>—3.64</b>

The averages in the above list are obtained by dividing the total amount of wages paid in each industry, as presented in the preceding table, by the aggregate average number of persons employed therein without discrimination as to sex or age. Such an average is, of course, only useful in comparison with averages similarly obtained. The average wage paid in All Industries, as shown by the final line of the table, was \$450.59 in 1892, and \$434.17 in 1893, a decrease of 3.64 per cent. The aggregate amount paid in wages also decreased in each



of the nine leading industries, as shown by the table on page 320.

It will be noticed that the average yearly earnings declined in each of the industries given in detail, and, with the exception of Cotton Goods; Leather; Metals and Metallic Goods; and Paper and Paper Goods, the percentage of decrease was larger than that shown for All Industries. In industries other than the nine specifically mentioned, the aggregate average decrease was 1.76 per cent.

We have each year pointed out that "the apparent increase or decrease in average yearly earnings, while to a certain extent indicative of fluctuations in employment, has but limited significance when considered alone, as many conditions affect these averages." The most important elements that should be considered in connection with such an average are the relative number of males and females, the number of day and piece hands, and the different proportions of adult employes in some industries as compared with others. Besides these, the varying degrees of skill required in different industries affect the average yearly earnings and account for some of the fluctuations observed in them.

On page 304 we presented an estimate showing that if 10 persons were out of employment in each of the 4,397 establishments whose returns are comprehended in this report, such proportion of unemployment would represent 43,970 persons. It would be very interesting to know the duration of unemployment in the year 1893 in the establishments under consideration. The tables by months on page 305 show that the period of unemployment commenced in July, but became very marked in August, and remained so until the end of the year. This would indicate a period of unemployment covering July to December, both inclusive, or six months. But, as the depression affected many industries to a greater or less extent previous to July 1, it is evident that the real duration of the period of unemployment was to some extent in excess of six months during the year 1893.

We are enabled to ascertain the real duration approximately, and very closely, by a comparison of the range of unemployment, indicated by persons unemployed at one time or another

during the year, with the decrease in total wages paid and lower average yearly earnings. The bases used are as follows :

Range of unemployment in 1892, . . . . .	76,836
Range of unemployment in 1893, . . . . .	123,018
Excess in 1893, . . . . .	46,182
Average Yearly Earnings in 1893, . . . . .	\$434.17
Decrease in Total Wages Paid in 1893, . . . . .	\$10,686,104

From the above bases we evolve the following comparative table :

ESTIMATED NUMBER OF PERSONS UNEMPLOYED BASED ON COMPARISONS OF DECREASE IN TOTAL WAGES PAID AND LOWER AVERAGE YEARLY EARNINGS.	Estimated Duration of Unemployment for Number of Employés Specified
59,072 . . . . .	5 months
53,702 . . . . .	5½ months
49,224 . . . . .	6 months
46,182 * . . . . .	6 months and 10 days

\* This figure indicates the increase in range of unemployment in 1893 as compared with 1892. See pages 46 and 47.

To sum up :

The unemployment in the 4,397 manufacturing establishments considered for the year 1893 represented a loss in time employed equivalent to 6 months and 10 days for each of 46,182 employés. It is not to be understood from this statement that each of 46,182 *identical* persons were unemployed during 6 months and 10 days, but simply that the amount of unemployment actually resulting from the industrial depression was economically equivalent to the idleness of this number of persons for the length of time named.

As usual, we present for 1893 a table supplying the necessary data for a comparison of the average yearly earnings with the different proportions of sexes and of day and piece hands employed and with the different proportions of adult employés. In this table, which follows, the percentages of males and females employed are obtained from the returns made in 1893. The percentages of day and piece hands and of the employés of different ages, are derived from the returns secured in the Decennial Census of 1885.

Average Yearly Earnings 1892	INDUSTRIES.	PERCENTAGES					
		PERSONS EMPLOYED		DAY AND PIECE HANDS: BOTH SEXES		AGE PERIODS: BOTH SEXES	
		Males	Fe- males	Day Hands	Piece Hands	Under 21 years	21 years and over
\$733.73	Liquors: malt, distilled, and fermented, . . . . .	99.95	0.05	98.95	1.05	3.41	96.59
682.89	Shipbuilding, . . . . .	100.00	-	95.31	4.69	5.02	94.98
679.90	Models, lasts, and patterns, . . . . .	99.90	0.10	97.60	2.40	10.78	89.22
631.84	Photographs and photographic materials, . . . . .	59.21	40.79	93.37	6.63	16.40	83.60
628.06	Musical instruments and materials, . . . . .	96.73	3.27	46.70	53.30	8.19	91.81
626.59	Cooking, lighting, and heating apparatus, . . . . .	100.00	-	67.22	32.78	7.16	92.84
624.55	Tobacco, snuff, and cigars, . . . . .	69.80	30.20	27.86	72.14	20.07	79.93
615.42	Railroad construction and equipment, . . . . .	99.32	0.68	100.00	-	3.81	96.19
613.48	Carriages and wagons, . . . . .	99.73	0.27	80.55	19.45	7.26	92.74
607.82	Glass, . . . . .	94.13	5.87	96.13	3.87	17.72	82.28
588.17	Fine arts and taxidermy, . . . . .	86.81	13.19	100.00	-	5.55	94.45
581.53	Chemical preparations (compounded), . . . . .	99.67	0.33	100.00	-	5.96	94.02
578.61	Printing, publishing, and bookbinding, . . . . .	69.58	30.42	72.49	27.51	26.49	73.51
571.02	Arms and ammunition, . . . . .	91.19	8.81	75.48	24.52	18.65	81.35
570.20	Awnings, sails, tents, etc., . . . . .	82.45	17.55	93.18	6.82	12.50	87.50
549.56	Trunks and valises, . . . . .	91.48	8.52	99.49	0.51	17.68	82.32
546.04	Liquors and beverages (not spirituous), . . . . .	100.00	-	100.00	-	7.49	92.51
543.28	Burial cases, caskets, coffins, etc., . . . . .	88.03	11.97	74.72	25.28	9.94	90.06
541.30	Machines and machinery, . . . . .	98.55	1.45	93.90	6.10	11.60	88.40
538.53	Stone, . . . . .	100.00	-	70.95	29.05	5.14	94.86
536.29	Wooden goods, . . . . .	97.41	2.59	70.90	29.10	15.28	84.72
531.35	Paints, colors, and crude chemicals, . . . . .	96.71	3.29	100.00	-	5.38	94.62
527.96	Artisans' tools, . . . . .	96.81	3.19	76.51	23.49	9.63	90.37
524.45	Dyestuffs, . . . . .	99.03	0.97	94.57	5.43	4.35	95.65
523.06	Clocks, watches, and jewelry, . . . . .	74.45	25.55	39.44	60.56	14.34	85.66
517.98	Saddlery and harness, . . . . .	91.92	8.08	-	-	-	-
511.69	Agricultural implements, . . . . .	100.00	-	62.48	37.52	8.89	91.11
505.28	Metals and metallic goods, . . . . .	90.41	9.59	73.69	26.31	14.88	85.12
502.78	Electroplating, . . . . .	93.64	6.36	85.61	14.39	20.14	79.86
498.33	Boots and shoes, . . . . .	69.47	30.53	31.06	68.94	14.79	85.21
490.55	Leather, . . . . .	96.95	3.05	78.85	21.15	9.32	90.68
490.48	Polishes and dressing, . . . . .	53.42	46.58	97.91	2.09	10.45	89.55
489.62	Straw and palm leaf goods, . . . . .	86.93	63.07	12.16	87.84	15.30	84.70
489.48	Emery and sand paper and cloth, etc., . . . . .	96.44	3.56	97.57	2.43	10.19	89.81
486.30	Tallow, candles, soap, and grease, . . . . .	87.39	12.61	88.69	11.31	11.85	88.15
483.74	Furniture, . . . . .	89.06	10.94	64.88	35.12	17.28	82.72
480.86	Earthen, plaster, and stone ware, . . . . .	89.00	11.00	77.72	22.28	18.83	81.17
476.76	Oils and illuminating fluids, . . . . .	90.93	9.07	96.60	3.40	6.57	93.43
476.63	Whips, lashes, and stocks, . . . . .	65.64	34.36	49.82	50.18	12.63	87.37
475.93	Sporting and athletic goods, . . . . .	90.94	9.06	48.11	51.89	13.58	86.42
472.25	Food preparations, . . . . .	78.38	21.62	92.40	7.60	14.09	85.91

\* Included in Leather in 1885.

Average Yearly Earnings 1893	INDUSTRIES.	PERCENTAGES					
		PERSONS EMPLOYED		DAY AND PIECE HANDS: BOTH SEXES		AGE PERIODS: BOTH SEXES	
		Males	Fe- males	Day Hands	Piece Hands	Under 21 years	21 years and over
\$465.03	Fertilizers, . . . . .	100.00	-	99.79	0.21	1.66	98.34
463.92	Cement, kaolin, lime, and plaster, .	100.00	-	98.27	1.73	6.94	93.06
463.62	Rubber and elastic goods, . . .	54.30	45.70	50.10	49.90	19.69	80.31
460.67	Brick, tiles, and sewer pipe, . . .	99.65	0.35	96.97	3.03	6.16	93.84
450.76	Glue, isinglass, and starch, . . .	90.79	9.21	98.90	1.10	17.86	82.14
439.72	Electrical apparatus and appliances,	92.55	7.45	96.65	3.35	11.17	88.83
438.59	Lumber, . . . . .	98.96	1.04	93.13	6.87	6.50	94.50
438.50	Crayons, pencils, crucibles, etc., .	100.00	-	70.21	29.79	24.47	75.53
438.22	Ink, mucilage, and paste, . . . .	58.10	41.90	96.77	3.23	40.32	59.68
417.71	Scientific instruments and appliances,	86.87	13.13	74.97	25.03	20.64	79.36
417.49	Print works, dye works, and bleach- eries, . . . . .	78.86	21.14	72.14	27.86	19.30	80.70
411.11	Clothing, . . . . .	28.91	71.09	51.24	48.76	16.94	83.06
409.80	Paper and paper goods, . . . . .	54.79	45.21	74.29	25.71	15.70	84.30
401.81	Ivory, bone, shell, and horn goods, etc., . . . . .	88.96	11.04	71.14	28.86	26.83	73.17
400.41	Perfumes, toilet articles, etc., . . .	40.89	59.11	70.21	29.79	19.15	80.85
398.45	Drugs and medicines, . . . . .	53.84	46.16	83.77	16.23	21.82	78.18
396.99	Toys and games (children's), . . . .	80.99	19.01	44.00	56.00	30.77	69.23
396.67	Boxes (paper and wooden), . . . .	58.27	41.73	59.51	40.49	24.37	75.63
377.02	Fancy articles, etc., . . . . .	28.63	71.37	62.73	37.27	31.82	68.18
376.10	Hose: rubber, linen, etc., . . . .	83.55	16.45	96.36	3.64	23.64	76.36
374.18	Buttons and dress trimmings, . . . .	37.06	62.94	71.77	28.23	22.93	77.07
371.44	Mixed textiles, . . . . .	72.38	27.62	77.78	22.22	24.89	75.11
371.00	Woollen goods, . . . . .	63.54	36.46	60.09	39.91	27.45	72.55
366.56	Carpetings, . . . . .	44.91	55.09	59.70	40.30	32.53	67.47
366.21	Cotton, woollen, and other textiles,	46.62	53.38	60.29	39.71	25.81	74.19
360.45	Brooms, brushes, and mops, . . . .	51.55	48.45	64.33	35.67	30.10	69.90
349.91	Cordage and twine, . . . . .	58.46	41.54	86.82	13.18	37.81	62.19
343.60	Cotton goods, . . . . .	48.23	51.77	44.16	55.84	35.89	64.11
343.36	Hair work (animal and human), . . .	48.24	51.76	90.87	9.13	26.44	73.56
326.62	Silk and silk goods, . . . . .	30.92	69.08	79.35	20.65	33.96	66.04
320.63	Hosiery and knit goods, . . . . .	27.25	72.75	28.55	71.45	29.81	70.19
303.66	Flax, hemp, jute, and linen goods, .	51.67	48.33	75.31	24.69	43.76	56.24
303.31	Corks, bungs, and taps, . . . . .	80.83	19.17	100.00	-	55.70	44.30
244.08	Worsted goods, . . . . .	52.36	47.64	69.04	30.96	35.59	64.41
\$434.17	ALL INDUSTRIES, . . . . .	66.31	33.69	58.17	41.83	20.49	79.51

The meaning of the foregoing table may be explained by a consideration of its final line. It will be seen that for All Industries the average yearly earnings in 1893 were \$434.17. Of the average number of persons employed, 66.31 per cent were males, and 33.69 per cent females. As explained, these percentages are derived from returns made in 1893. In the

same industries it was shown in the Decennial Census of 1885, that 58.17 per cent were day hands and 41.83 per cent piece hands, and also that 20.49 per cent of the employes were under twenty-one years of age while 79.51 per cent were twenty-one years of age and over. These proportions, in the absence of later returns, may be held to apply to the industries in 1893. In comparing the industries, one with another, as shown in the table, it will be seen that these different elements have an important bearing upon the average yearly earnings, since the highest earnings will, as a rule, be found to prevail in industries employing males chiefly and a large proportion of adults.

#### CLASSIFIED WEEKLY WAGES.

Actual wage conditions in the different industries are more accurately seen from the tables presenting classified weekly wages in connection with each industry presentation, pages 61 to 274, than from aggregate or average tables of wages. The following table brings forward such a classified wage presentation with percentages for All Industries :

CLASSIFICATION OF WEEKLY WAGE.	PERCENTAGES			
	1892		1893	
	Males	Females	Males	Females
Under \$5, . . . . .	30.70	69.30	37.73	62.27
\$5 but under \$6, . . . . .	34.14	65.86	35.16	64.84
\$6 but under \$7, . . . . .	45.06	54.94	43.95	56.05
\$7 but under \$8, . . . . .	55.66	44.34	56.63	43.37
\$8 but under \$9, . . . . .	99.66	0.34	63.35	36.65
\$9 but under \$10, . . . . .	79.83	20.17	79.47	20.53
\$10 but under \$12, . . . . .	85.07	14.93	84.95	15.05
\$12 but under \$15, . . . . .	93.73	6.27	93.44	6.56
\$15 but under \$20, . . . . .	96.90	3.10	97.03	2.97
\$20 and over, . . . . .	98.84	1.16	98.99	1.01
TOTALS, . . . . .	66.74	33.26	66.64	33.36

This table indicates that of the operatives receiving less than \$5 per week, 30.70 per cent were males in 1892, and 37.73 per cent in 1893. The proportion of females in this class was 69.30 per cent in 1892, and 62.27 per cent in 1893. The pro-

portion of males in each wage class increases after the \$9 wage limit is passed, while the proportion of females correspondingly declines. The largest percentages of females are, of course, found in the lowest wage classes, while the exact opposite is true with reference to the males.

The fluctuations in the different wage classes are shown, for the nine leading industries, and for All Industries, in the following table :

INDUSTRIES, AND CLASSIFICATION OF WEEKLY WAGE.	PERCENTAGES					
	1892			1893		
	Males	Females	Totals	Males	Females	Totals
<b>BOOTS AND SHOES.</b>	100.00	100.00	100.00	100.00	100.00	100.00
Under \$5, . . . . .	4.92	16.55	8.52	5.06	16.66	8.74
\$5 but under \$6, . . . .	3.29	10.14	5.41	3.16	10.15	5.38
\$6 but under \$7, . . . .	4.84	11.42	6.88	5.18	12.30	7.44
\$7 but under \$8, . . . .	5.44	12.36	7.58	5.43	12.26	7.60
\$8 but under \$9, . . . .	5.34	10.86	7.05	5.87	11.37	7.61
\$9 but under \$10, . . . .	8.71	11.60	9.60	8.91	11.35	9.68
\$10 but under \$12, . . . .	14.07	12.94	13.72	14.18	13.27	13.89
\$12 but under \$15, . . . .	25.29	9.42	20.38	24.02	8.70	19.16
\$15 but under \$20, . . . .	20.85	4.31	15.73	20.61	3.59	15.21
\$20 and over, . . . . .	7.25	0.40	5.13	7.59	0.35	5.29
<b>CARPETINGS.</b>	100.00	100.00	100.00	100.00	100.00	100.00
Under \$5, . . . . .	16.18	29.74	23.50	13.71	24.15	19.40
\$5 but under \$6, . . . .	7.82	19.12	13.92	8.82	19.50	14.64
\$6 but under \$7, . . . .	13.42	14.04	13.75	6.11	16.12	11.57
\$7 but under \$8, . . . .	7.38	8.76	8.12	13.79	13.64	13.71
\$8 but under \$9, . . . .	9.87	8.00	8.86	10.17	8.59	9.31
\$9 but under \$10, . . . .	11.56	10.74	11.11	11.26	10.29	10.73
\$10 but under \$12, . . . .	11.24	8.99	10.03	10.69	6.48	8.89
\$12 but under \$15, . . . .	13.73	0.57	6.63	13.62	1.16	6.83
\$15 but under \$20, . . . .	7.20	0.04	3.34	9.08	0.07	4.17
\$20 and over, . . . . .	1.60	-	0.74	2.75	-	1.25
<b>COTTON GOODS.</b>	100.00	100.00	100.00	100.00	100.00	100.00
Under \$5, . . . . .	17.97	28.54	23.46	17.26	27.77	22.67
\$5 but under \$6, . . . .	9.78	19.31	14.73	10.11	18.68	14.52
\$6 but under \$7, . . . .	16.61	20.31	18.53	16.33	20.57	18.51
\$7 but under \$8, . . . .	11.74	14.72	13.29	11.49	13.91	12.74
\$8 but under \$9, . . . .	9.44	8.78	9.10	10.45	10.28	10.36
\$9 but under \$10, . . . .	10.65	5.48	7.96	10.42	5.68	7.98
\$10 but under \$12, . . . .	11.73	2.60	6.99	12.08	2.73	7.27
\$12 but under \$15, . . . .	7.89	0.25	3.92	7.58	0.35	3.86
\$15 but under \$20, . . . .	2.73	0.01	1.32	2.89	0.03	1.41
\$20 and over, . . . . .	1.46	-	0.70	1.39	-	0.63

INDUSTRIES, AND CLASSIFICATION OF WEEKLY WAGE.	PERCENTAGES					
	1892			1893		
	Males	Females	Totals	Males	Females	Totals
<b>LEATHER.</b>	100.00	100.00	100.00	100.00	100.00	100.00
Under \$5, . . . . .	1.81	22.58	2.45	1.42	31.84	2.57
\$5 but under \$6, . . . .	2.07	24.42	2.76	1.88	24.72	2.73
\$6 but under \$7, . . . .	5.10	20.28	5.57	4.10	20.97	4.74
\$7 but under \$8, . . . .	7.60	13.83	7.79	8.70	10.11	8.76
\$8 but under \$9, . . . .	10.43	7.37	10.34	10.29	4.49	10.07
\$9 but under \$10, . . . .	20.82	6.45	20.38	22.54	3.37	21.81
\$10 but under \$12, . . . .	24.44	4.15	23.81	24.21	3.75	23.44
\$12 but under \$15, . . . .	17.11	0.92	16.00	17.57	0.75	16.94
\$15 but under \$20, . . . .	3.30	-	3.05	7.24	-	6.97
\$20 and over, . . . . .	2.32	-	2.25	2.05	-	1.97
<b>MACHINES AND MACHINERY.</b>	100.00	100.00	100.00	100.00	100.00	100.00
Under \$5, . . . . .	6.47	23.47	6.72	5.84	20.89	6.65
\$5 but under \$6, . . . .	3.52	13.95	3.68	4.35	13.70	4.48
\$6 but under \$7, . . . .	5.65	28.57	5.99	5.33	34.25	5.74
\$7 but under \$8, . . . .	7.50	18.03	7.65	7.56	12.67	7.63
\$8 but under \$9, . . . .	7.32	6.80	7.31	7.89	5.48	7.36
\$9 but under \$10, . . . .	11.27	3.06	11.15	11.19	3.77	11.08
\$10 but under \$12, . . . .	15.06	3.06	14.89	14.83	4.45	14.69
\$12 but under \$15, . . . .	20.74	2.72	20.47	20.63	4.11	20.39
\$15 but under \$20, . . . .	18.04	0.34	17.78	18.30	0.68	18.06
\$20 and over, . . . . .	4.43	-	4.36	4.06	-	4.02
<b>METALS AND METALLIC GOODS.</b>	100.00	100.00	100.00	100.00	100.00	100.00
Under \$5, . . . . .	4.83	24.85	6.95	5.42	21.62	7.00
\$5 but under \$6, . . . .	3.76	19.85	5.43	3.24	19.10	4.79
\$6 but under \$7, . . . .	5.89	24.79	7.85	5.67	24.35	7.50
\$7 but under \$8, . . . .	7.79	14.98	8.54	7.91	16.63	8.77
\$8 but under \$9, . . . .	7.02	8.04	7.13	7.43	8.78	7.56
\$9 but under \$10, . . . .	14.24	3.66	13.14	13.77	4.66	12.88
\$10 but under \$12, . . . .	16.00	2.92	14.65	16.59	3.46	15.30
\$12 but under \$15, . . . .	20.27	0.73	18.24	18.80	1.13	17.07
\$15 but under \$20, . . . .	15.23	0.18	13.66	15.37	0.27	13.90
\$20 and over, . . . . .	4.92	-	4.41	5.80	-	5.23
<b>PAPER AND PAPER GOODS.</b>	100.00	100.00	100.00	100.00	100.00	100.00
Under \$5, . . . . .	3.36	21.76	11.72	3.48	24.81	13.23
\$5 but under \$6, . . . .	1.96	26.59	13.15	2.36	25.28	12.64
\$6 but under \$7, . . . .	3.60	24.53	13.11	4.56	25.33	14.05
\$7 but under \$8, . . . .	10.89	16.34	13.37	12.02	12.96	12.45
\$8 but under \$9, . . . .	10.89	6.40	8.85	10.59	6.95	8.98
\$9 but under \$10, . . . .	23.88	2.95	14.37	23.54	3.19	14.24
\$10 but under \$12, . . . .	14.27	1.12	8.30	14.23	1.01	8.18
\$12 but under \$15, . . . .	15.23	0.19	8.39	15.10	0.34	8.35
\$15 but under \$20, . . . .	12.49	0.12	6.87	10.50	0.13	5.76
\$20 and over, . . . . .	3.43	-	1.87	3.62	-	1.97

INDUSTRIES, AND CLASSIFICATION OF WEEKLY WAGE.	PERCENTAGES					
	1892			1893		
	Males	Females	Totals	Males	Females	Totals
<b>WOOLLEN GOODS.</b>	100.00	100.00	100.00	100.00	100.00	100.00
Under \$5, . . . . .	8.96	25.02	14.97	9.02	25.92	15.25
\$5 but under \$6, . . . . .	6.16	12.80	8.65	6.68	13.62	9.24
\$6 but under \$7, . . . . .	13.11	18.38	15.08	12.66	17.16	14.32
\$7 but under \$8, . . . . .	19.24	21.85	20.22	18.37	19.22	18.69
\$8 but under \$9, . . . . .	11.28	9.41	10.58	13.60	12.56	13.21
\$9 but under \$10, . . . . .	13.78	6.66	11.11	13.44	6.04	10.71
\$10 but under \$12, . . . . .	13.13	4.91	10.05	12.59	4.53	9.62
\$12 but under \$15, . . . . .	8.32	0.97	5.57	7.92	0.94	5.34
\$15 but under \$20, . . . . .	4.11	-	2.57	3.94	0.01	2.49
\$20 and over, . . . . .	1.91	-	1.20	1.78	-	1.13
<b>WORSTED GOODS.</b>	100.00	100.00	100.00	100.00	100.00	100.00
Under \$5, . . . . .	8.54	21.00	14.71	10.25	23.36	16.63
\$5 but under \$6, . . . . .	9.81	25.97	17.82	6.81	24.22	15.28
\$6 but under \$7, . . . . .	10.53	25.87	18.13	10.22	29.61	19.65
\$7 but under \$8, . . . . .	19.46	12.52	16.02	20.72	10.85	15.91
\$8 but under \$9, . . . . .	8.54	7.08	7.82	10.08	5.67	7.94
\$9 but under \$10, . . . . .	10.86	3.31	7.12	10.83	2.89	6.99
\$10 but under \$12, . . . . .	11.83	8.90	7.92	12.55	3.16	7.99
\$12 but under \$15, . . . . .	14.92	0.35	7.71	13.40	0.08	6.92
\$15 but under \$20, . . . . .	3.80	-	1.92	3.71	0.16	1.93
\$20 and over, . . . . .	1.66	-	0.83	1.38	-	0.71
<b>ALL INDUSTRIES.</b>	100.00	100.00	100.00	100.00	100.00	100.00
Under \$5, . . . . .	7.53	25.19	16.37	7.48	24.64	13.20
\$5 but under \$6, . . . . .	4.67	18.09	9.13	4.79	17.65	9.08
\$6 but under \$7, . . . . .	7.65	18.72	11.33	7.51	19.13	11.39
\$7 but under \$8, . . . . .	8.71	13.93	10.45	8.84	13.52	10.40
\$8 but under \$9, . . . . .	7.87	8.98	5.27	8.49	9.81	8.93
\$9 but under \$10, . . . . .	12.87	6.52	10.76	12.95	6.68	10.86
\$10 but under \$12, . . . . .	14.81	5.22	11.62	14.83	5.25	11.63
\$12 but under \$15, . . . . .	17.00	2.36	12.53	17.14	2.41	12.23
\$15 but under \$20, . . . . .	13.69	0.88	9.43	13.47	0.82	9.25
\$20 and over, . . . . .	4.60	0.11	3.11	4.50	0.09	3.03

In this table, the total number of males, the total number of females, and the total number of employes of both sexes are each considered as representing 100 per cent, and the number of employes in each wage class constitute parts of this aggregate, or in other words, are represented by percentages which totalize to 100. In All Industries, that class in which the proportion of the sexes is about the same is the class receiving \$8 but under \$9 per week. The percentages of males in this class



in 1892 and 1893 were 7.87 and 8.49, respectively, and of females 8.98 and 9.81, respectively. The percentages of females receiving less than \$5 a week declined in 1893 to 24.64 as against 25.19 found in this class in 1892, and the percentage of males also declined from 7.53 in 1892 to 7.48 in 1893. The percentages of males and females receiving \$5 but under \$6, \$6 but under \$7, and \$7 but under \$8, do not materially vary in either year. The percentages of males and females receiving \$9 but under \$10, \$10 but under \$12, and \$12 but under \$15, are practically the same in each year. The corresponding details for each of the nine leading industries will be readily seen upon examination of the table.

For the purpose of bringing clearly before the reader the fact of increase or decrease in the aggregate number of employes receiving specified wage in each of the classified wage classes, in 1893 as compared with 1892, the following graphic table is introduced:

INDUSTRIES, AND SEX.	INCREASE (+), OR DECREASE (-), IN NUMBER OF PERSONS RECEIVING SPECIFIED WEEKLY WAGE IN 1893 AS COMPARED WITH 1892									
	Under \$5	\$5 but under \$6	\$6 but under \$7	\$7 but under \$8	\$8 but under \$9	\$9 but under \$10	\$10 but under \$12	\$12 but under \$15	\$15 but under \$20	\$20 and over
<i>Boots and Shoes.</i>	+	-	+	+	+	+	+	-	-	+
Males, . . . . .	+	-	+	-	+	+	+	-	-	+
Females, . . . . .	+	+	+	-	+	-	+	-	-	-
<i>Carpetings.</i>	-	+	-	+	+	-	-	+	+	+
Males, . . . . .	-	+	-	+	+	-	-	-	+	+
Females, . . . . .	-	+	+	+	+	-	-	+	+	x
<i>Cotton Goods.</i>	-	-	-	-	+	+	+	-	+	-
Males, . . . . .	-	+	-	-	+	-	+	-	+	-
Females, . . . . .	-	-	+	-	+	+	+	+	+	x
<i>Leather.</i>	+	-	-	+	-	+	-	+	-	-
Males, . . . . .	-	-	-	+	-	+	-	+	-	-
Females, . . . . .	+	+	+	-	-	-	-	-	x	x
<i>Machines and Machinery.</i>	-	+	-	-	+	-	-	-	+	-
Males, . . . . .	-	+	-	+	+	-	-	-	+	-
Females, . . . . .	-	-	+	-	-	+	+	+	+	x
<i>Metals and Metallic Goods.</i>	+	-	-	+	+	-	+	-	+	+
Males, . . . . .	+	-	-	+	+	-	+	-	+	+
Females, . . . . .	-	-	-	+	+	+	+	+	+	x

INDUSTRIES, AND SEX.	INCREASE (+), OR DECREASE (—), IN NUMBER OF PERSONS RECEIVING SPECIFIED WEEKLY WAGE IN 1902 AS COMPARED WITH 1901									
	Under \$5	\$5 but under \$6	\$6 but under \$7	\$7 but under \$8	\$8 but under \$9	\$9 but under \$10	\$10 but under \$12	\$12 but under \$15	\$15 but under \$20	\$20 and over
<i>Paper and Paper Goods.</i>	+	—	+	—	+	—	—	—	—	+
Males, . . . . .	+	+	+	+	—	—	—	—	—	+
Females, . . . . .	+	—	+	—	+	+	—	+	+	×
<i>Woollen Goods.</i>	+	+	—	—	+	—	—	—	—	—
Males, . . . . .	+	+	—	—	+	—	—	—	—	—
Females, . . . . .	+	+	—	—	+	—	—	—	+	×
<i>Worsted Goods.</i>	+	—	+	—	+	—	+	—	+	—
Males, . . . . .	+	—	—	+	+	+	+	—	—	—
Females, . . . . .	+	—	+	—	—	—	—	—	+	×
<i>ALL INDUSTRIES.</i>	—	—	+	—	+	+	+	—	—	—
Males, . . . . .	—	+	—	+	+	+	+	—	—	—
Females, . . . . .	—	—	+	—	+	+	+	+	—	—

In this table, increases in the number of persons receiving a specified wage in each wage class are shown by the sign (+) and decreases by the sign (—). Wherever, in any class, no employes were returned as receiving the specified wage, the fact is indicated by the sign (×). With these explanations, the meaning of the table will be clear.

We confine our analysis to All Industries. It will be seen that an increase is shown for all employes, in the aggregate, in the following classes: \$6 but under \$7, \$8 but under \$9, \$9 but under \$10, and \$10 but under \$12. The number of males increased in each of these classes, except \$6 but under \$7, and increases are also shown in the classes \$5 but under \$6 and \$7 but under \$8; an increase is shown for females in each of the classes showing an increase for all employes in the aggregate, as well as for the class containing those receiving \$12 but under \$15 per week. A decrease is shown for all employes in the aggregate in the following classes: Under \$5, \$5 but under \$6, \$7 but under \$8, \$12 but under \$15, \$15 but under \$20, and \$20 and over.

## PROPORTION OF BUSINESS DONE: BY INDUSTRIES.

The statistical presentations relating to this subject, which covers proportion of business done and average number of days in operation, will be found on pages 55 to 60.

## PROPORTION OF BUSINESS DONE.

In computing the proportion of business done, maximum production, that is to say, the greatest amount of goods that can be turned out with the present facilities, is considered 100 per cent. In the 4,397 establishments making return in each year, the proportion of business done in 1892 is represented by 69.38 per cent and in 1893 by 59.18 per cent. Three industries report a larger proportion of business done in 1893 than in 1892; they are Burial Cases, Caskets, Coffins, etc.; Corks, Bungs, and Taps; and Earthen, Plaster, and Stone Ware. The percentages of increase are 0.19, 2.33, and 5.79, respectively. The following table reproduces the average proportion of business done for the nine selected industries:

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGE PRO- PORTION OF BUSINESS DONE		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Proportion	Percent- ages
Boots and shoes, . . . . .	712	69.50	48.50	-20.91	-30.09
Carpetings, . . . . .	11	80.64	69.27	-11.37	-14.10
Cotton goods, . . . . .	149	93.77	86.09	-7.68	-8.19
Leather, . . . . .	148	70.21	60.53	-9.68	-13.97
Machines and machinery, . . . . .	335	68.47	59.20	-9.27	-13.54
Metals and metallic goods, . . . . .	341	69.32	59.37	-9.95	-14.35
Paper and paper goods, . . . . .	98	84.98	73.66	-11.32	-13.33
Woollen goods, . . . . .	125	87.46	74.03	-13.43	-15.36
Worsted goods, . . . . .	20	90.15	77.40	-12.75	-14.14
Other industries, . . . . .	2,458	66.19	58.98	-7.21	-10.89
ALL INDUSTRIES, . . . . .	4,397	69.38	59.18	-10.20	-14.70

As indicated in the above table, Cotton Goods is the only industry in which production approached full capacity in both years, the percentages being 93.77 in 1892 and 86.09 in 1893. Next to this industry ranks Worsted Goods, in which the establishments ran to 90.15 per cent of the full capacity in 1892 and

77.40 per cent in 1893. Without exception, so far as these nine leading industries are concerned, and also with respect to All Industries, the proportion of business done in 1893 decreased as compared with 1892, the percentages of decrease being, in a number of cases, quite large. Confining our analysis to 1893 only, it will be noted that in All Industries considered together, production approximated but about six-tenths of the full capacity of the establishments. In Leather, Machines and Machinery, and Metals and Metallic Goods the same condition obtained. In Carpetings, production was slightly under seven-tenths of full capacity, while in Paper and Paper Goods and Woollen Goods over seven-tenths of the full capacity was reached. In Cotton Goods, production exceeded eight-tenths of the full capacity of the establishments and in Worsted Goods the production was slightly under eight-tenths. In Boots and Shoes is found the lowest percentage, the proportion of business done being less than one-half of the productive capacity of the establishments.

#### DAYS IN OPERATION.

The statistical presentation relating to this division of the subject will be found on pages 58 and 59. The average number of days in operation during 1892 was, for All Industries, 297.83 and during 1893, 277.36, a decrease of 20.47 days, or 6.87 per cent. Three industries only show an increase in average number of days in operation in 1893 as compared with 1892; they are, Fine Arts and Taxidermy; Rubber and Elastic Goods; and Stone. The increase in average number of days in these three industries was 1.50, 3.40, and 8.81, respectively.

In the following table we bring forward the facts for the nine leading industries:

INDUSTRIES.	Number of Estab- lishments Con- sidered	AVERAGE NUMBER OF DAYS IN OPERATION		INCREASE (+), OR DECREASE (-), IN 1893	
		1892	1893	Days	Percent- ages
Boots and shoes, . . . . .	712	293.56	274.41	-19.15	-6.52
Carpetings, . . . . .	11	303.33	247.53	-55.80	-18.40
Cotton goods, . . . . .	149	304.85	282.09	-22.76	-7.47
Leather, . . . . .	148	294.12	279.04	-15.08	-5.13
Machines and machinery, . . . . .	335	303.51	286.60	-16.91	-5.57
Metals and metallic goods, . . . . .	341	292.02	266.52	-25.50	-8.73
Paper and paper goods, . . . . .	98	289.99	276.52	-13.47	-4.64
Woollen goods, . . . . .	125	299.29	262.37	-36.92	-12.34
Worsted goods, . . . . .	20	303.61	277.96	-25.65	-8.45
Other industries, . . . . .	2,458	294.68	278.67	-16.01	-5.43
ALL INDUSTRIES, . . . . .	4,397	297.83	277.36	-20.47	-6.87

The decrease in average number of days in operation for All Industries was 20.47. Industries showing a decrease greater than that shown for All Industries are Carpetings in which, on an average per establishment, 55.80 days were lost during 1893; Woollen Goods with an average loss of 36.92 days; Worsted Goods, the average loss per establishment being 25.65 days; Metals and Metallic Goods, an average loss of 25.50 days, and Cotton Goods, an average loss of 22.76 days. The other industries mentioned in detail, show fewer days lost, on an average, than is shown for All Industries.

The total number of working days in 1893, exclusive of 53 Sundays and seven holidays, was 305. The average number of working days in a month was, therefore, 25.42 days. The following industries show a loss of more than one month but less than two months, on an average, in 1893:

Buttons and Dress Trimmings.	Lumber.
Clocks, Watches, and Jewelry.	Metals and Metallic Goods.
Cotton, Woollen, and Other Textiles.	Musical Instruments and Materials.
Crayons, Pencils, Crucibles, etc.	Print Works, Dye Works, and
Electrical Apparatus and Appli- ances.	Bleacheries.
Emery and Sand Paper and Cloth, etc.	Silk and Silk Goods.
Flax, Hemp, Jute, and Linen Goods.	Trunks and Valises.
	Woollen Goods.
	Worsted Goods.

In three industries, Carpetings; Glass; and Whips, Lashes, and Stocks, the loss, on an average, exceeded two months.

SUMMARY.

It has been customary in these reports to summarize the leading points relative to the condition of the different industries in a series of tables in which the industries are separated into classes, these classes being based upon the returns as to the average number of days in operation and the average proportion of business done. It has not been found practicable to show these classes in tabular form as in previous reports, but in the following table is brought forward the necessary data for analytical treatment :

INDUSTRIES.	INCREASE (+), DECREASE (—), OR NO CHANGE (—), IN 1893 AS COMPARED WITH 1892 IN—				
	Average Number of Days in Operation	Average Proportion of Busi- ness Done	Average Yearly Earnings	Average Number of Persons Employed	"Range"
Agricultural implements, . . . . .	—12.67	—5.55	—\$22.88	—26	+8
Arms and ammunition, . . . . .	—7.82	—9.08	—28.01	—125	+474
Artisans' tools, . . . . .	—20.81	—9.82	—7.74	—139	+368
Awnings, sails, tents, etc., . . . . .	—0.18	—4.82	+5.66	—4	—5
Boots and shoes, . . . . .	—19.15	—20.91	—24.27	—3,470	+5,776
Boxes (paper and wooden), . . . . .	—20.38	—9.53	—5.22	—153	+70
Brick, tiles, and sewer pipe, . . . . .	—6.77	—4.57	+2.04	—80	+108
Brooms, brushes, and mops, . . . . .	—11.90	—12.57	—7.14	—22	+86
Burial cases, caskets, coffins, etc., . . . . .	—1.78	+0.16	+0.12	+3	+22
Buttons and dress trimmings, . . . . .	—29.41	—16.42	+0.70	—163	+385
Carpetings, . . . . .	—55.80	—11.37	—21.11	—368	+2,629
Carriages and wagons, . . . . .	—8.79	—7.38	+18.02	—281	+847
Cement, kaolin, lime, and plaster, . . . . .	—7.88	—1.29	—11.96	—3	+6
Chemical preparations (compounded), . . . . .	—5.18	—12.70	—16.78	—18	+17
Clocks, watches, and jewelry, . . . . .	—25.92	—11.81	—46.52	—316	+519
Clothing, . . . . .	—17.44	—9.93	+11.02	—1,097	+586
Cooking, lighting, and heating apparatus, . . . . .	—15.57	—10.88	+3.32	—180	+343
Cordage and twine, . . . . .	—11.11	—9.63	—1.54	—129	—408
Corks, bungs, and taps, . . . . .	—2.32	+1.33	+4.23	—5	+7
Cotton goods, . . . . .	—22.76	—7.68	—2.39	—208	+11,608
Cotton, woollen, and other textiles, . . . . .	—48.68	—2.34	—11.08	—353	+1,454
Crayons, pencils, crucibles, etc., . . . . .	—34.92	—13.34	—68.36	—3	—4
Drugs and medicines, . . . . .	—6.83	—1.82	—12.06	—26	—14
Dyestuffs, . . . . .	—20.52	—9.60	—16.60	—43	+4
Earthen, plaster, and stone ware, . . . . .	—11.33	+3.86	—117.24	+20	+29
Electrical apparatus and appliances, . . . . .	—38.97	—6.00	—133.53	—446	+1,436
Electroplating, . . . . .	—11.61	—7.56	+3.06	—2	+27
Emery and sand paper and cloth, etc., . . . . .	—34.70	—24.70	—49.41	—6	+137
Fancy articles, etc., . . . . .	—11.18	—10.80	—10.74	—9	=
Fertilizers, . . . . .	—2.19	—1.00	—27.82	—2	+7
Fine arts and taxidermy, . . . . .	+1.50	—15.00	—163.83	=	—1
Flax, hemp, jute, and linen goods, . . . . .	—39.08	—4.14	—11.76	+80	—75

INDUSTRIES.	INCREASE (+), DECREASE (-), OR NO CHANGE (=), IN 1902 AS COMPARED WITH 1892 IN —				
	Average Number of Days in Operation	Average Proportion of Busi- ness Done	Average Yearly Earnings	Average Number of Persons Employed	"Range"
Food preparations, . . . . .	-5.78	-3.47	-\$19.01	-518	+215
Furniture, . . . . .	-11.30	-9.30	-19.03	-462	+330
Glass, . . . . .	-51.79	-4.00	+62.76	-153	+45
Glue, isinglass, and starch, . . . . .	-1.21	-6.28	+2.66	-10	+6
Hair work (animal and human), . . . . .	-21.02	-10.22	-40.00	-16	+1
Hose: rubber, linen, etc., . . . . .	-20.79	-18.33	-26.64	+43	+60
Hosiery and knit goods, . . . . .	-17.94	-9.60	-25.81	+46	+97
Ink, mucilage, and paste, . . . . .	-10.95	-2.67	+6.64	-4	+1
Ivory, bone, shell, and horn goods, etc., . . . . .	-11.20	-6.80	-4.92	-42	+91
Leather, . . . . .	-15.08	-9.68	-16.97	-316	+1,352
Liquors and beverages (not spirituous), . . . . .	-1.14	-5.52	-5.11	-18	+37
Liquors: malt, distilled, and fermented, . . . . .	-0.56	-4.47	+22.05	+42	+16
Lumber, . . . . .	-44.95	-4.24	-29.73	+49	+97
Machines and machinery, . . . . .	-16.91	-9.27	-20.90	-484	+3,697
Metals and metallic goods, . . . . .	-25.50	-9.95	-11.87	-1,043	+1,582
Mixed textiles, . . . . .	-13.29	-7.46	+4.31	-12	+206
Models, lasts, and patterns, . . . . .	-3.20	-5.87	-28.40	-3	+45
Musical instruments and materials, . . . . .	-33.35	-13.93	-31.50	-626	+1,091
Oils and illuminating fluids, . . . . .	-0.44	-9.70	+20.99	-10	+43
Paints, colors, and crude chemicals, . . . . .	-14.16	-5.05	-11.36	-5	+25
Paper and paper goods, . . . . .	-13.47	-11.32	-13.52	-427	+1,212
Perfumes, toilet articles, etc., . . . . .	-14.68	-20.00	+20.92	-4	+7
Photographs and photographic materials, . . . . .	-2.90	-9.41	-4.50	-29	-1
Polishes and dressing, . . . . .	-8.40	-10.89	+3.82	-7	+34
Printing, publishing, and bookbinding, . . . . .	-2.13	-6.47	+32.31	-53	-21
Print works, dye works, and bleacheries, . . . . .	-33.31	-6.23	-14.69	-205	+1,936
Railroad construction and equipment, . . . . .	-8.99	-6.07	+15.04	+744	+675
Rubber and elastic goods, . . . . .	+3.40	-8.85	+42.56	+140	+234
Saddlery and harness, . . . . .	-7.18	-13.53	-23.36	-52	+23
Scientific instruments and appliances, . . . . .	-11.73	-8.20	-30.22	-119	+145
Shipbuilding, . . . . .	-2.58	-3.34	-20.38	+7	+57
Silk and silk goods, . . . . .	-33.98	-25.25	-14.41	-110	+357
Sporting and athletic goods, . . . . .	-22.38	-10.29	-28.01	-30	-25
Stone, . . . . .	+8.81	-1.08	-12.87	+470	-542
Straw and palm leaf goods, . . . . .	-3.01	-4.85	+10.87	-38	+199
Tallow, candles, soap, and grease, . . . . .	-11.02	-6.19	+18.87	-15	+24
Tobacco, snuff, and cigars, . . . . .	-7.00	-8.07	+48.91	-74	+15
Toys and games (children's), . . . . .	-14.52	-8.25	-25.82	-29	+3
Trunks and valises, . . . . .	-26.44	-9.00	-44.88	-15	+1
Whips, lashes, and stocks, . . . . .	-54.79	-4.10	+15.52	-111	+306
Wooden goods, . . . . .	-14.08	-6.94	+1.02	-147	+167
Woollen goods, . . . . .	-36.92	-13.43	-18.54	-1,243	+1,232
Worsted goods, . . . . .	-25.65	-12.76	-125.18	+29	+1,733
ALL INDUSTRIES, . . . . .	-20.47	-10.20	-\$16.42	-13,034	+46,152

The industries usually comprised in the first class are those exhibiting an increase in average number of days in operation

and also in the average proportion of business done. In 1893, as will be seen by the above table, there were no industries which could be classed under this head. Three industries only, Fine Arts and Taxidermy; Rubber and Elastic Goods; and Stone, are to be found which contain the elements necessary to be quoted in the second class, namely, those showing an increase in the average number of days in operation and a decrease in the average proportion of business done in 1893 as compared with 1892. Of these industries, Rubber and Elastic Goods only shows an increase in average yearly earnings. Increases appear in the average number of persons employed in Rubber and Elastic Goods and Stone, while in Fine Arts and Taxidermy the average number of persons employed remained the same in both years. The range of unemployment, as indicated by the difference between the smallest and greatest number of persons employed, is narrower in 1893 than in 1892 in Fine Arts and Taxidermy and Stone but wider in Rubber and Elastic Goods. All of the industries in this class show increase in value of product.

The industries of the third class include those which show a decline in the average number of days in operation but a greater average proportion of business done and include, for 1893, Burial Cases, Caskets, Coffins, etc.; Corks, Bungs, and Taps; and Earthen, Plaster, and Stone Ware. Of these, only the first named shows an increase in value of goods made. With the exception of Earthen, Plaster, and Stone Ware, increases are shown in average yearly earnings, and, except Corks, Bungs, and Taps, an increase in the average number of persons employed. The range of unemployment is wider in 1893 than in 1892 in all three industries.

The fourth class comprises those industries which show a decrease in the average number of days in operation and also in the average proportion of business done. This class includes all of the industries shown in the foregoing table, with the exception of the six just analyzed which, as has been stated, are included in the second and third classes, respectively. All of these 69 industries report a decreased product value, except the following nine: Arms and Ammunition; Cement, Kaolin, Lime, and Plaster; Fertilizers; Flax, Hemp, Jute, and Linen Goods; Glue, Isinglass, and Starch; Liquors: Malt, Distilled,



and Fermented; Printing, Publishing, and Bookbinding; Railroad Construction and Equipment; and Straw and Palm Leaf Goods.

Of these industries, 69 in number, decreased average annual earnings appear in all but 22; they are, Awnings, Sails, Tents, etc.; Brick, Tiles, and Sewer Pipe; Buttons and Dress Trimings; Carriages and Wagons; Clothing; Cooking, Lighting, and Heating Apparatus; Electroplating; Glass; Glue, Isinglass, and Starch; Ink, Mucilage, and Paste; Liquors: Malt, Distilled, and Fermented; Mixed Textiles; Oils and Illuminating Fluids; Perfumes, Toilet Articles, etc.; Polishes and Dressing; Printing, Publishing, and Bookbinding; Railroad Construction and Equipment; Straw and Palm Leaf Goods; Tallow, Candles, Soap, and Grease; Tobacco, Snuff, and Cigars; Whips, Lashes, and Stocks; and Wooden Goods.

A decrease in the average number of persons employed is shown in 61 industries, increases appearing in the following eight only: Flax, Hemp, Jute, and Linen Goods; Hose: Rubber, Linen, etc.; Hosiery and Knit Goods; Liquors: Malt, Distilled, and Fermented; Lumber; Railroad Construction and Equipment; Shipbuilding; and Worsted Goods. The range of unemployment was wider in 1893 than in 1892 in 60 industries and narrower in the following eight: Awnings, Sails, Tents, etc.; Cordage and Twine; Crayons, Pencils, Crucibles, etc.; Drugs and Medicines; Flax, Hemp, Jute, and Linen Goods; Photographs and Photographic Materials; Printing, Publishing, and Bookbinding; and Sporting and Athletic Goods. There was no variation in the range of unemployment in Fancy Articles, etc.

In the following table is presented a graphic portrayal of conditions in each industry in 1893 as compared with 1892, with respect to the total amount of capital invested, total value of goods made and work done, total amount paid in wages during the year, and the average number of persons employed. An increase in any of these items is indicated by the sign (+), a decrease by the sign (—), and no change by the sign (=).

INDUSTRIES.	INCREASE (+), DECREASE (—), OR NO CHANGE (—), IN 1893 AS COMPARED WITH 1892 IN —			
	Amount of Capital Invested	Value of Goods Made and Work Done	Total Amount Paid in Wages	Average Number of Persons Employed
Agricultural implements, . . . . .	—	—	—	—
Arms and ammunition, . . . . .	+	+	—	—
Artisans' tools, . . . . .	+	—	—	—
Awnings, sails, tents, etc., . . . . .	—	—	—	—
Boots and shoes, . . . . .	+	—	—	—
Boxes (paper and wooden), . . . . .	+	—	—	—
Brick, tiles, and sewer pipe, . . . . .	+	—	—	—
Brooms, brushes, and mops, . . . . .	+	—	—	—
Burial cases, caskets, coffins, etc., . . . . .	—	+	+	+
Buttons and dress trimmings, . . . . .	+	—	—	—
Carpetings, . . . . .	+	—	—	—
Carriages and wagons, . . . . .	+	—	—	—
Cement, kaolin, lime, and plaster, . . . . .	+	+	—	—
Chemical preparations (compounded), . . . . .	+	—	—	—
Clocks, watches, and jewelry, . . . . .	—	—	—	—
Clothing, . . . . .	—	—	—	—
Cooking, lighting, and heating apparatus, . . . . .	—	—	—	—
Cordage and twine, . . . . .	+	—	—	—
Corks, bungs, and taps, . . . . .	—	—	—	—
Cotton goods, . . . . .	—	—	—	—
Cotton, woollen, and other textiles, . . . . .	—	—	—	—
Crayons, pencils, crucibles, etc., . . . . .	—	—	—	—
Drugs and medicines, . . . . .	+	—	—	—
Dyestuffs, . . . . .	+	—	—	—
Earthen, plaster, and stone ware, . . . . .	—	—	—	+
Electrical apparatus and appliances, . . . . .	+	—	—	—
Electroplating, . . . . .	—	—	—	—
Emery and sand paper and cloth, etc., . . . . .	+	—	—	—
Fancy articles, etc., . . . . .	+	—	—	—
Fertilizers, . . . . .	+	+	—	—
Fine arts and taxidermy, . . . . .	+	+	—	—
Flax, hemp, jute, and linen goods, . . . . .	—	+	+	+
Food preparations, . . . . .	—	—	—	—
Furniture, . . . . .	—	—	—	—
Glass, . . . . .	+	—	—	—
Glue, isinglass, and starch, . . . . .	—	+	—	—
Hair work (animal and human), . . . . .	+	—	—	—
Hose: rubber, linen, etc., . . . . .	—	—	+	+
Hosiery and knit goods, . . . . .	+	—	—	+
Ink, mucilage, and paste, . . . . .	—	—	—	—
Ivory, bone, shell, and horn goods, etc., . . . . .	—	—	—	—
Leather, . . . . .	—	—	—	—
Liquors and beverages (not spirituous), . . . . .	+	—	—	—
Liquors: malt, distilled, and fermented, . . . . .	+	+	+	+
Lumber, . . . . .	+	—	—	+
Machines and machinery, . . . . .	+	—	—	—
Metals and metallic goods, . . . . .	—	—	—	—
Mixed textiles, . . . . .	—	—	—	—
Models, lasts, and patterns, . . . . .	+	—	—	—

INDUSTRIES.	INCREASE (+), DECREASE (-), OR NO CHANGE, (=), IN 1903 AS COMPARED WITH 1902 IN —			
	Amount of Capital Invested	Value of Goods Made and Work Done	Total Amount Paid in Wages	Average Number of Persons Employed
Musical instruments and materials, . . .	+	—	—	—
Oils and illuminating fluids, . . . . .	+	—	—	—
Paints, colors, and crude chemicals, . . .	—	—	—	—
Paper and paper goods, . . . . .	+	—	—	—
Perfumes, toilet articles, etc., . . . . .	—	—	—	—
Photographs and photographic materials, .	—	—	—	—
Pollishes and dressing, . . . . .	+	—	—	—
Printing, publishing, and bookbinding, .	+	+	+	—
Print works, dye works, and bleacheries, .	+	—	—	—
Railroad construction and equipment, . .	—	+	+	+
Rubber and elastic goods, . . . . .	+	+	+	+
Saddlery and harness, . . . . .	—	—	—	—
Scientific instruments and appliances, . .	—	—	—	—
Shipbuilding, . . . . .	+	—	—	+
Silk and silk goods, . . . . .	+	—	—	—
Sporting and athletic goods, . . . . .	+	—	—	—
Stone, . . . . .	—	+	+	+
Straw and palm leaf goods, . . . . .	+	+	+	—
Tallow, candles, soap, and grease, . . .	+	—	+	—
Tobacco, snuff, and cigars, . . . . .	—	—	+	—
Toys and games (children's), . . . . .	—	—	—	—
Trunks and valises, . . . . .	—	—	—	—
Whips, lashes, and stocks, . . . . .	+	—	—	—
Wooden goods, . . . . .	+	—	—	—
Woollen goods, . . . . .	—	—	—	—
Worsted goods, . . . . .	—	—	—	+
ALL INDUSTRIES, . . . . .	+	—	—	—

All Industries, in the aggregate, shows an increased amount of capital invested, a decreased product value, a smaller amount disbursed in wages, and a smaller average number of persons employed. The same statement applies to the following industries, 29 in number :

Artisans' Tools.  
Boots and Shoes.  
Boxes (Paper and Wooden).  
Brick, Tiles, and Sewer Pipe.  
Brooms, Brushes, and Mops.  
Buttons and Dress Trimmings.  
Carpetings.  
Carriages and Wagons.  
Chemical Preparations (Compound-  
ed).

Cordage and Twine.  
Drugs and Medicines.  
Dyestuffs.  
Electrical Apparatus and Appli-  
ances. .  
Emery and Sand Paper and Cloth,  
etc.  
Fancy Articles, etc.  
Glass.  
Hair Work (Animal and Human).

**Liquors and Beverages (Not Spirituous).**

**Machines and Machinery.**

**Models, Lasts, and Patterns.**

**Musical Instruments and Materials.**

**Oils and Illuminating Fluids.**

**Paper and Paper Goods.**

**Polishes and Dressing.**

**Print Works, Dye Works, and Bleacheries.**

**Silk and Silk Goods.**

**Sporting and Athletic Goods.**

**Whips, Lashes, and Stocks.**

**Wooden Goods.**

In four industries a smaller capital is returned, but, nevertheless, an increase in each of the other items. These are: Burial Cases, Caskets, Coffins, etc.; Flax, Hemp, Jute, and Linen Goods; Railroad Construction and Equipment; and Stone. Two industries, only, show a larger capital, greater product value, an increase in aggregate amount paid in wages, and a larger average number of persons employed. These are: Liquors: Malt, Distilled, and Fermented, and Rubber and Elastic Goods. On the other hand, there are 24 industries which show, not only a decrease in amount of capital invested, but a decrease in each of the other items. These are:

**Agricultural Implements.**

**Awnings, Sails, Tents, etc.**

**Clocks, Watches, and Jewelry.**

**Clothing.**

**Cooking, Lighting, and Heating Apparatus.**

**Corks, Bungs, and Taps.**

**Cotton Goods.**

**Cotton, Woollen, and Other Textiles.**

**Electroplating.**

**Food Preparations.**

**Furniture.**

**Ink, Mucilage, and Paste.**

**Ivory, Bone, Shell, and Horn Goods, etc.**

**Leather.**

**Metals and Metallic Goods.**

**Mixed Textiles.**

**Paints, Colors, and Crude Chemicals.**

**Perfumes, Toilet Articles, etc.**

**Photographs and Photographic Materials.**

**Saddlery and Harness.**

**Scientific Instruments and Appliances.**

**Toys and Games (Children's).**

**Trunks and Valises.**

**Woollen Goods.**

The following table reproduces the leading facts relative to All Industries from the presentation on pages 271 to 273:

CLASSIFICATION.	1892	1893	INCREASE (+), OR DECREASE (-), IN 1893	
			Amounts	Percent- ages
Number of private firms, . . . .	3,531	3,478	-56	-1.58
Number of corporations, . . . .	820	872	+52	+6.34
Number of partners, . . . .	5,671	5,519	-152	-2.68
Number of stockholders, . . . .	37,061	38,284	+1,220	+3.29
Amount of capital invested, . . . .	\$439,015,263	\$444,480,277	+\$5,465,014	+1.24
Value of stock used, . . . .	\$376,554,375	\$348,991,905	-\$27,562,470	-7.32
Value of goods made and work done, .	\$639,137,402	\$587,343,550	-\$51,793,852	-8.10
Persons employed :				
Average number, . . . .	306,203	293,169	-13,034	-4.26
Smallest number, . . . .	267,168	222,370	-44,798	-16.77
Greatest number, . . . .	341,001	315,388	+1,381	+0.40
Excess of greatest over smallest num- ber, . . . .	76,836	123,018	+46,182	+60.10
Total amount paid in wages, . . . .	\$137,972,501	\$127,286,397	-\$10,686,104	-7.73
Average yearly earnings, . . . .	\$450.59	\$434.17	-\$16.42	-3.64
Average proportion of business done, .	69.38	59.18	-10.20	-14.70
Average number of days in operation, .	297.83	277.36	-20.47	-6.87

Many of the percentages of variation in the different elements surrounding production in 1893 as compared with 1892 are large. In every case the percentages indicate decreases except in the number of corporations, the number of stockholders, the amount of capital invested, and greatest number of persons employed.

INDUSTRIES.		Number of Estab- lishments Con- sidered	Amount of Capital Invested	Average Number of Persons Employed
1	Boots and shoes, . . . .	712	\$29,303,026	45,389
2	Carpetings, . . . .	11	7,993,248	4,335
3	Cotton goods, . . . .	149	118,855,744	73,540
4	Leather, . . . .	148	7,963,904	5,602
5	Machines and machinery, . . . .	335	32,917,618	17,495
6	Metals and metallic goods, . . . .	341	20,390,350	13,313
7	Paper and paper goods, . . . .	98	23,137,410	9,658
8	Woollen goods, . . . .	125	25,554,830	15,837
9	Worsted goods, . . . .	20	11,038,952	9,035

[NOTE. It is proper to explain certain designations used in the above table. By "Industry value created above the value of stock and materials consumed. The values presented in this from the total value of goods made in each of the specified industries, the value of stock used; proceeds of each industry, one part of this industry product is paid to the labor force in the which are paid freights, insurance, interest on loans (credit capital), interest on stock (fixed or stock and wages. The remainder, if any, is the profit of the employer. The entire balance of "Profit and Minor Expense Fund," and is thus designated in the table. Of course, it will be enumerated, paid out of this balance, are in themselves considerable in amount, and are only to (stock), and wages.]

The increase in number of corporations and stockholders, it will be remembered, is due to changes from the private firm to the corporate basis on the part of the establishments making return in each year. The same cause accounts for percentages of decrease in the number of private firms and in the number of partners. It will be remembered that these returns are rendered by identical establishments in each year. In these establishments capital increased to the extent of 1.24 per cent, value of stock used decreased 7.32 per cent, and value of goods made and work done decreased 8.10 per cent.

The average number of persons employed decreased 4.26 per cent, and the total amount paid in wages exhibits a decrease of 7.75 per cent, while the range of unemployment was 60.10 per cent greater in 1893 than in 1892. The average amount of yearly earnings also shows a decrease, the decline being 3.64 per cent. The average proportion of business done, based upon the full productive capacity of the establishments, was 14.70 per cent less in 1893 than in 1892; while the average number of days in operation was 6.87 per cent less.

The next table presents the actual product per \$1,000 of capital invested in each of the nine leading industries, with the average product per employé, the percentages of industry product paid in wages, and the percentages devoted to other expenses.

Total Amount Paid in Wages During the Year	Industry Product	Profit and Minor Expense Fund	INDUSTRY PRODUCT		PERCENTAGE OF INDUSTRY PRODUCT		
			Per \$1,000 of Capital	Average per Employé	Devoted to Profit and Minor Expenses	Paid in Wages	
\$22,618,509	\$37,711,998	\$15,093,429	\$1,286.97	\$330.86	40.02	59.98	1
1,589,019	2,640,133	1,051,114	830.30	609.03	39.81	60.19	2
25,268,510	40,777,686	15,509,176	343.09	554.50	38.03	61.97	3
2,748,051	4,515,468	1,767,417	566.99	806.05	39.14	60.86	4
9,470,094	17,850,895	8,380,801	542.29	1,020.34	46.95	53.05	5
6,726,827	12,014,563	5,287,736	589.23	902.47	44.01	55.99	6
3,957,802	8,369,264	4,411,462	861.72	866.56	52.71	47.29	7
6,883,015	11,387,112	5,504,097	445.59	718.11	48.34	51.66	8
2,202,796	5,579,530	3,376,734	505.44	618.23	60.52	39.48	9

Product" is meant the actual result of the productive forces in the industry, that is, the added and the following tables under the designation "Industry Product," are obtained by deducting the difference being added value or actual product due to the industry. In the division of the form of wages, this being labor's share of the product. The balance constitutes a fund from invested capital), rents, commissions, salaries, etc.; in fact, all expenses other than those for the industry product remaining after the deduction of the amount paid in wages, becomes a understood that the term "Minor Expense" is relative. The expenses, some of which we have be classed as "Minor" in comparison with the generally larger amounts expended for materials

The note presented with this table explains certain designations used in it. Referring to the table, we find the largest industry product per \$1,000 of capital in Boots and Shoes, namely, \$1,286.97. No other industry approaches this figure. Nearest to it, however, is Metals and Metallic Goods, the industry product being \$589.23. Following this industry ranks Leather, Machines and Machinery, and Worsted Goods, their respective industry products per \$1,000 of capital being \$566.99, \$542.29, and \$505.44. Next below these industries are Woollen Goods, Paper and Paper Goods, and Cotton Goods, the industry products per \$1,000 of capital in these industries being, respectively, \$445.59, \$361.72, and \$343.09. Carpetings ranks lowest among the industries in the selected list, its industry product per \$1,000 of capital being \$330.30.

If we consider that the figures just quoted offer an indication as to the efficiency of the capital invested in these industries during 1893, then those which present the average industry product per employé may be taken as indicating the efficiency of labor. With respect to this point, Machines and Machinery leads the other industries, the average product per employé being \$1,020.34. Not far below it is Metals and Metallic Goods, in which an average of \$902.47 appears. Following in the order named, with averages as specified, are Paper and Paper Goods, \$866.56; Boots and Shoes, \$830.86; Leather, \$806.05; Woollen Goods, \$718.11; Worsted Goods, \$618.23; Carpetings, \$609.03; and Cotton Goods, \$554.50.

Cotton Goods leads when the percentage of industry product paid in wages is considered, the percentage being 61.97. Next rank Leather and Carpetings, in which the percentages are nearly alike, being 60.86 and 60.19, respectively. Boots and Shoes follows with a percentage of 59.98 and is in turn followed by Metals and Metallic Goods, Machines and Machinery, and Woollen Goods, in which the percentages of industry product paid in wages are 55.99, 53.05, and 51.66, respectively. In Paper and Paper Goods, ranking next in this comparison, the percentage is 47.29, while lowest in the comparison is Worsted Goods, the percentage being 39.48. These percentages of industry product paid in wages are the complements of the percentages of industry product devoted to profit and minor

expenses, these two items aggregating 100 per cent, or the whole of the industry product.

In the following comparison the rank of the different industries for 1893, as regards the amount of industry product per \$1,000 of capital, is compared with the rank of the same industries for 1892, as derived from the report on Annual Statistics of Manufactures for that year :

1892.	1893.
Boots and Shoes.	Boots and Shoes.
Leather.	Metals and Metallic Goods.
Metals and Metallic Goods.	Leather.
Machines and Machinery.	Machines and Machinery.
Woollen Goods.	Worsted Goods.
Paper and Paper Goods.	Woollen Goods.
Worsted Goods.	Paper and Paper Goods.
Carpetings.	Cotton Goods.
Cotton Goods.	Carpetings.

In the above comparison, Boots and Shoes and Machines and Machinery retain the same position in each year. The places occupied by Leather and Metals and Metallic Goods, and Carpetings and Cotton Goods are reversed. Woollen Goods which ranked fifth in 1892 ranks sixth in 1893; Paper and Paper Goods which ranked sixth in 1892 ranks seventh in 1893; and Worsted Goods which ranked seventh in 1892 ranks fifth in 1893.

With respect to the average industry product per employé, the rank of the industries in each of the years appears in the following table :

1892.	1893.
Paper and Paper Goods.	Machines and Machinery.
Machines and Machinery.	Metals and Metallic Goods.
Leather.	Paper and Paper Goods.
Metals and Metallic Goods.	Boots and Shoes.
Boots and Shoes.	Leather.
Woollen Goods.	Woollen Goods.
Carpetings.	Worsted Goods.
Cotton Goods.	Carpetings.
Worsted Goods.	Cotton Goods.

With the exception of Woollen Goods, every industry changed its position in 1893; Paper and Paper Goods fell from



first to third position in 1893 and Machines and Machinery rose from second to first place. Metals and Metallic Goods which ranked fourth in 1892 was second in 1893; Boots and Shoes rose from fifth in 1892 to fourth in 1893, while Leather dropped from third to fifth place. Worsted Goods ranked ninth in 1892 but ranked seventh in 1893, and Carpetings and Cotton Goods dropped from seventh and eighth, respectively, in 1892, to eighth and ninth, respectively, in 1893.

The next comparison relates to the percentage of industry product paid in wages, the industries ranking as follows in each year :

<b>1892.</b>	<b>1893.</b>
Worsted Goods.	Cotton Goods.
Boots and Shoes.	Leather.
Carpetings.	Carpetings.
Cotton Goods.	Boots and Shoes.
Machines and Machinery.	Metals and Metallic Goods.
Metals and Metallic Goods.	Machines and Machinery.
Leather.	Woollen Goods.
Woollen Goods.	Paper and Paper Goods.
Paper and Paper Goods.	Worsted Goods.

In this comparison, Carpetings alone retained the rank in 1893 which it held in 1892. Worsted Goods dropped from first place in 1892 to ninth in 1893. Boots and Shoes which ranked second in 1892 ranked fourth in 1893, Cotton Goods which ranked fourth in 1892 ranked first in 1893, Machines and Machinery and Metals and Metallic Goods changed places with each other in 1893, Leather which ranked seventh in 1892 ranked second in 1893 and Woollen Goods and Paper and Paper Goods which ranked eighth and ninth, respectively, in 1892, ranked seventh and eighth, respectively, in 1893.

We present a series of separate tables for the nine leading industries, for the purpose of comparison between the years 1892 and 1893, bringing forward for that purpose data contained in the table on pages 342 and 343. The first relates to Boots and Shoes.

*Boots and Shoes.* [Comparisons for 712 Establishments.]

CLASSIFICATION.	1892	1893
Amount of capital invested, . . . . .	\$29,067,583	\$29,303,026
Value of goods made and work done (gross product), . . . .	\$103,878,098	\$92,740,686
Value of stock used and other materials consumed in production, .	\$62,667,535	\$55,028,688
Industry product (gross product less value of stock and materials),	\$41,210,563	\$37,711,998
Wages (labor's direct share of product), . . . . .	\$25,533,508	\$22,618,509
Profit and minor expense fund (industry product less wages), .	\$15,677,055	\$15,093,429
Percentage of industry product paid in wages, . . . . .	61.96	59.98
Percentage of industry product devoted to profit and minor expenses,	38.04	40.02
Percentage of profit and minor expense fund of capital invested, .	53.93	51.51

The percentages of industry product paid in wages in 1892 and 1893 are 61.96 and 59.98, respectively, a decrease being shown in the last named year. Of course, the percentage of industry product devoted to profit and minor expenses shows a corresponding increase, being 38.04 in 1892 and 40.02 in 1893. The percentage which this profit and minor expense fund forms of capital invested was 51.51 in 1893 as against 53.93 in 1892; that is, a smaller portion of the amount remaining in this industry, after eliminating the cost of stock, was devoted to wages in 1893 than in 1892, leaving a larger amount for the payment of expenses other than wages and stock, and for profit, and this amount formed a smaller percentage of the total capital in the industry in 1893 than in 1892.

A similar comparison for Carpetings follows:

*Carpetings.* [Comparisons for 11 Establishments.]

CLASSIFICATION.	1892	1893
Amount of capital invested, . . . . .	\$7,828,754	\$7,993,248
Value of goods made and work done (gross product), . . . .	\$8,214,540	\$7,427,385
Value of stock used and other materials consumed in production, .	\$5,218,619	\$4,787,252
Industry product (gross product less value of stock and materials),	\$2,995,921	\$2,640,133
Wages (labor's direct share of product), . . . . .	\$1,823,229	\$1,589,019
Profit and minor expense fund (industry product less wages), .	\$1,172,692	\$1,051,114
Percentage of industry product paid in wages, . . . . .	60.86	60.19
Percentage of industry product devoted to profit and minor expenses,	39.14	39.81
Percentage of profit and minor expense fund of capital invested, .	14.98	13.15

The percentages of industry product paid in wages in this industry in 1892 and 1893 are 60.86 and 60.19, respectively,

a very slight decrease in the last named year. Eliminating wages, the fund devoted to profit and minor expenses rose from 39.14 in 1892 to 39.81 in 1893, and this fund formed but 13.15 per cent of capital invested in 1893, as against 14.98 per cent in 1892.

The next table presents a comparison for Cotton Goods.

*Cotton Goods.* [Comparisons for 149 Establishments.]

CLASSIFICATION.	1892	1893
Amount of capital invested, . . . . .	\$119,652,351	\$118,855,744
Value of goods made and work done (gross product), . . . .	\$90,811,928	\$88,189,818
Value of stock used and other materials consumed in production, .	\$46,961,841	\$47,411,932
Industry product (gross product less value of stock and materials),	\$43,850,087	\$40,777,886
Wages (labor's direct share of product), . . . . .	\$25,515,747	\$25,268,510
Profit and minor expense fund (industry product less wages), .	\$18,334,340	\$15,509,376
Percentage of industry product paid in wages, . . . . .	58.19	61.97
Percentage of industry product devoted to profit and minor expenses,	41.81	38.03
Percentage of profit and minor expense fund of capital invested, .	15.32	13.05

Unlike the two industries previously presented, in Cotton Goods the percentage of industry product paid in wages increased in 1893 as compared with 1892, the percentages being 61.97 and 58.19, respectively. Of course, the percentages of industry product devoted to profit and minor expenses correspondingly decreased, falling from 41.81 to 38.03. The profit and minor expense fund formed 13.05 per cent of capital in 1893 as against 15.32 per cent in 1892.

The next table relates to Leather.

*Leather.* [Comparisons for 148 Establishments.]

CLASSIFICATION.	1892	1893
Amount of capital invested, . . . . .	\$8,011,549	\$7,962,904
Value of goods made and work done (gross product), . . . .	\$18,644,270	\$15,548,823
Value of stock used and other materials consumed in production, .	\$11,891,499	\$11,032,354
Industry product (gross product less value of stock and materials),	\$6,752,771	\$4,516,469
Wages (labor's direct share of product), . . . . .	\$3,003,501	\$2,748,051
Profit and minor expense fund (industry product less wages), .	\$3,749,270	\$1,767,417
Percentage of industry product paid in wages, . . . . .	44.48	60.96
Percentage of industry product devoted to profit and minor expenses,	55.52	39.14
Percentage of profit and minor expense fund of capital invested, .	46.80	22.19

The greatest variation is found in this industry, the percentage of industry product paid in wages increasing from 44.48 per cent in 1892 to 60.86 per cent in 1893. The percentages of industry product devoted to profit and minor expenses, of course, declined correspondingly, falling from 55.52 to 39.14. The percentage which the profit and minor expense fund formed of capital invested was 46.80 in 1892 and 22.19 in 1893.

The next table relates to Machines and Machinery.

*Machines and Machinery.* [Comparisons for 335 Establishments.]

CLASSIFICATION.	1892	1893
Amount of capital invested, . . . . .	\$30,811,473	\$32,917,618
Value of goods made and work done (gross product), . . . .	\$29,980,988	\$27,975,359
Value of stock used and other materials consumed in production, .	\$11,465,090	\$10,124,464
Industry product (gross product less value of stock and materials),	\$18,495,298	\$17,850,895
Wages (labor's direct share of product), . . . . .	\$10,107,731	\$9,470,094
Profit and minor expense fund (industry product less wages), .	\$8,387,567	\$8,380,801
Percentage of industry product paid in wages, . . . . .	54.65	53.05
Percentage of industry product devoted to profit and minor expenses,	45.35	46.95
Percentage of profit and minor expense fund of capital invested, .	27.22	25.46

The percentage of industry product paid in wages in each year is nearly the same, and so, also, is the percentage of industry product devoted to profit and minor expenses, the variation being but a little over one per cent in either case. The percentage of profit and minor expense fund of capital invested declined from 27.22 in 1892 to 25.46 in 1893.

A comparison for Metals and Metallic Goods follows :

*Metals and Metallic Goods.* [Comparisons for 341 Establishments.]

CLASSIFICATION.	1892	1893
Amount of capital invested, . . . . .	\$20,780,435	\$20,390,350
Value of goods made and work done (gross product), . . . .	\$26,259,252	\$22,873,245
Value of stock used and other materials consumed in production, .	\$12,723,710	\$10,863,682
Industry product (gross product less value of stock and materials),	\$13,535,542	\$12,014,563
Wages (labor's direct share of product), . . . . .	\$7,424,150	\$6,726,827
Profit and minor expense fund (industry product less wages), .	\$6,111,392	\$5,287,736
Percentage of industry product paid in wages, . . . . .	54.85	55.99
Percentage of industry product devoted to profit and minor expenses,	45.15	44.01
Percentage of profit and minor expense fund of capital invested, .	29.41	25.93

Like the comparison for Machines and Machinery, the variation in the percentages of industry product paid in wages and devoted to profit and minor expenses, were slight, being a little over one per cent. The percentage of profit and minor expense fund of capital invested shows a decline from 29.41 in 1892 to 25.93 in 1893.

The facts for Paper and Paper Goods are shown in the next table.

*Paper and Paper Goods.* [Comparisons for 98 Establishments.]

CLASSIFICATION.	1892	1893
Amount of capital invested, . . . . .	\$21,944,434	\$23,137,410
Value of goods made and work done (gross product), . . . . .	\$26,029,658	\$22,746,194
Value of stock used and other materials consumed in production, . . . . .	\$15,170,117	\$14,376,540
Industry product (gross product less value of stock and materials), . . . . .	\$10,859,541	\$8,369,654
Wages (labor's direct share of product), . . . . .	\$4,260,230	\$3,967,902
Profit and minor expense fund (industry product less wages), . . . . .	\$6,599,311	\$4,401,752
Percentage of industry product paid in wages, . . . . .	39.31	47.29
Percentage of industry product devoted to profit and minor expenses, . . . . .	60.69	52.71
Percentage of profit and minor expense fund of capital invested, . . . . .	30.03	19.07

In this industry, as in some of the others, the percentage of industry product paid in wages increased in 1893 as compared with 1892, the gain being from 39.31 to 47.29; while the percentage of industry product devoted to profit and minor expenses declined from 60.69 to 52.71. This fund was 30.03 per cent of capital invested in 1892 falling to 19.07 per cent in 1893.

The next table relates to Woollen Goods.

*Woollen Goods.* [Comparisons for 125 Establishments.]

CLASSIFICATION.	1892	1893
Amount of capital invested, . . . . .	\$27,220,349	\$25,554,890
Value of goods made and work done (gross product), . . . . .	\$34,074,848	\$28,061,654
Value of stock used and other materials consumed in production, . . . . .	\$20,360,682	\$16,674,543
Industry product (gross product less value of stock and materials), . . . . .	\$13,714,166	\$11,387,111
Wages (labor's direct share of product), . . . . .	\$6,661,065	\$5,863,015
Profit and minor expense fund (industry product less wages), . . . . .	\$7,053,081	\$5,524,097
Percentage of industry product paid in wages, . . . . .	48.57	51.66
Percentage of industry product devoted to profit and minor expenses, . . . . .	51.43	48.34
Percentage of profit and minor expense fund of capital invested, . . . . .	25.91	21.54

In this industry also, we note an increase in the percentage of industry product paid in wages, the increase being from 48.57 to 51.66, matched by a corresponding decrease in the percentage of industry product devoted to profit and minor expenses, this percentage being 51.43 in 1892 and 48.34 in 1893. The percentages of profit and minor expense fund of capital invested in 1892 and 1893 were 25.91 and 21.54, respectively.

The final table relates to Worsted Goods.

*Worsted Goods.* [Comparisons for 20 Establishments.]

CLASSIFICATION.	1892	1893
Amount of capital invested, . . . . .	\$12,132,839	\$11,083,952
Value of goods made and work done (gross product), . . . .	\$17,328,062	\$15,523,227
Value of stock used and other materials consumed in production, .	\$12,239,108	\$9,948,697
Industry product (gross product less value of stock and materials),	\$5,088,954	\$5,579,530
Wages (labor's direct share of product), . . . . .	\$3,321,837	\$2,202,796
Profit and minor expense fund (industry product less wages), .	\$1,767,117	\$3,376,734
Percentage of industry product paid in wages, . . . . .	65.28	39.48
Percentage of industry product devoted to profit and minor expenses,	34.72	60.52
Percentage of profit and minor expense fund of capital invested, .	14.56	30.59

In this industry, the largest decrease yet noted in the percentage of industry product paid in wages is found. This percentage was 65.28 in 1892 and 39.48 in 1893, a variation of 25.80 per cent. This left a larger margin for the payment of profit and minor expenses in the last named year, the percentages of industry product devoted to this purpose being 34.72 in 1892 and 60.52 in 1893. This fund formed 30.59 per cent of capital in 1893 as against 14.56 per cent in 1892.

The returns permit the following condensed general statements as regards the years 1892 and 1893 for the 4,397 establishments :

CAPITAL INVESTED.

*The increase in capital devoted to production in 1893 as compared with 1892, in All Industries, amounted to 1.24 per cent. In connection with this statement it should be remembered that this does not necessarily imply an investment of more money in*

*productive enterprises; and when taken in connection with the other facts relative to the condition of the industries in the Commonwealth during the year, it is possible that while a statistical increase is shown, this increase is due to the value of stock in process of manufacture or to some of the items classed as capital, other than cash, as explained in the statement on page 286. In the nine leading industries, representing 62.35 per cent of all capital, as returned in 1893, and 55.37 per cent of the industrial capital of the Commonwealth, as returned in the Decennial Census of 1885, the following facts appear for the year 1893: In four of these industries, namely, Boots and Shoes, Carpetings, Machines and Machinery, and Paper and Paper Goods, an increase in capital is shown, amounting to 0.81 per cent in Boots and Shoes, 2.10 per cent in Carpetings, 6.84 per cent in Machines and Machinery, and 5.44 per cent in Paper and Paper Goods. In each of the other leading industries, five in number, the capital devoted to production shows a decrease in 1893 as compared with 1892, the percentages being as follows: Cotton Goods 0.67, Leather 0.59, Metals and Metallic Goods 1.88, Woollen Goods 6.12, and Worsted Goods 9.02.*

#### STOCK USED.

*In All Industries, considered in the aggregate, the value of stock used in 1893 shows a decrease as compared with 1892 of 7.32 per cent. In eight of the nine leading industries, in which the aggregate value of stock used amounted to 51.65 per cent of all the stock used, as returned in 1893, and 46.25 per cent of all stock used, as returned in the Decennial Census of 1885, the following percentages of decrease appear: Boots and Shoes, 12.19; Carpetings, 8.27; Leather, 7.22; Machines and Machinery, 11.70; Metals and Metallic Goods, 14.62; Paper and Paper Goods, 5.23; Woollen Goods, 18.10; and Worsted Goods, 18.71. A slight increase in the value of stock used appears in Cotton Goods, amounting to 0.96 per cent only.*

#### GOODS MADE.

*The aggregate value of goods made in All Industries in 1893 as compared with 1892 shows a decrease in value of 8.10 per cent. In each of the nine leading industries, which, in the*



aggregate, returned 54.67 per cent of the value of goods made, as returned in 1893, and 47.60 per cent of the value of all goods made, as returned in the Decennial Census of 1885, the following percentages of decrease appear: Boots and Shoes, 10.72; Carpetings, 9.58; Cotton Goods, 2.89; Leather, 16.60; Machines and Machinery, 6.63; Metals and Metallic Goods, 12.88; Paper and Paper Goods, 12.61; Woollen Goods, 17.65; and Worsted Goods, 10.39.

#### PERSONS EMPLOYED.

In 1892 the average number of persons employed in the 4,397 establishments, represented in All Industries, was 306,203, and the average number of persons employed in the same industries in 1893 was 293,169, a decrease of 4.26 per cent. The number of persons employed at the periods of employment of the greatest number was 344,004 in 1892, and 345,388 in 1893, an increase of 0.40 per cent, a very slight variation; while the number employed at the periods of employment of the smallest number in 1892 was 267,168, and in 1893, 222,370, a decrease of 16.77 per cent. The range of unemployment was considerably greater in 1893 than in 1892, the number unemployed at some period of longer or shorter duration being 123,018 in 1893 as against 76,836 in 1892, an increase of 60.10 per cent.

In the nine leading industries previously mentioned, the following percentages of decrease in the average number of persons employed are found: Boots and Shoes, 7.10; Carpetings, 7.82; Cotton Goods, 0.28; Leather, 5.34; Machines and Machinery, 2.69; Metals and Metallic Goods, 7.27; Paper and Paper Goods, 4.23; and Woollen Goods, 7.27. Worsted Goods exhibits the slight increase of 0.32 per cent.

#### WAGES PAID.

The total amount paid in wages in the establishments represented in the 75 industries considered, decreased 7.75 per cent in 1893 as compared with 1892. In the nine principal industries the following percentages of decrease appear: Boots and Shoes, 11.42; Carpetings, 12.85; Cotton Goods, 0.97; Leather, 8.51; Machines and Machinery, 6.31; Metals and



*Metallic Goods, 9.39; Paper and Paper Goods, 7.29; Woollen Goods, 11.68; and Worsted Goods, 33.69.*

*The average yearly earnings per individual, without regard to sex or age, employed in the 75 industries, were \$450.59 in 1892, declining to \$434.17 in 1893, a decrease of 3.64 per cent. The range from highest to lowest average yearly earnings was from \$752 to \$299.08 in 1892, and from \$733.73 to \$244.08 in 1893. The higher earnings ruled in the industries demanding greater skill and employing males chiefly, and the lower in factory industries employing a large proportion of females and young persons.*

#### PROPORTION OF BUSINESS DONE.

*The average proportion of business done reached 69.38 per cent in 1892 and 59.18 per cent in 1893, of the full productive capacity of the 4,397 establishments, a decrease of 14.70 per cent.*

*The average number of days in operation was 297.83 in 1892 and 277.36 in 1893, a decrease of 6.87 per cent.*

*The summaries just presented emphasize the anomalous condition of the industries of the Commonwealth during the year 1893 owing to the industrial depression. While it is true that a slight increase in capital invested appears, it is probably a figurative increase only, and explained by the remarks relating to capital on page 286, to which we have before referred. In each of the other elements considered, namely, value of stock used, value of goods made, average number of persons employed, aggregate amount of wages paid, average yearly earnings per individual, proportion of business done, and average number of days in operation, a decline appears, when All Industries are considered in the aggregate, in 1893 as compared with 1892; and with the exception of a small percentage of increase in the value of stock used in Cotton Goods and in the average number of persons employed in Worsted Goods, a decline is shown in each of these elements in each of the nine leading industries.*

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# INDUSTRIAL CHRONOLOGY.

1893.



## INDUSTRIAL CHRONOLOGY—1893.

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**Abington.** In February, Abington Shoe Manufacturing Co. formed. *May.* New 80 horse power boiler set up in the Poole factory.—Thompson Bros., shoes, discontinued business; no successor. *September.* Gasoline plant put in Buffum's machine shop.—J. B. Lewis Co., shoes, succeeded by Henry Tucker; business moved to Avon. *November.* E. P. Reed's planing mill damaged by fire.—E. L. Sprague, shoes, shut down from July to November, inclusive.

**Acton.** In February, hoop shop of Allen Smith damaged by fire. *March.* Fletcher's shoe factory destroyed by fire. *July.* Overalls factory shut down.—No. 2 mill of American Powder Co. demolished by explosion. *December.* American Powder Mills damaged by explosion.

**Adams.** In January, new Berkshire No. 2 Mill started up with 100 hands. *February.* The 150 horse power engine of Renfrew Manufacturing Co. set in motion for first time. *April.* L. L. Brown Paper Co. removed two small boilers from mill and put in large one.—Renfrew Manufacturing Co. removed 50 looms from upper to new lower mill; whole plant to be run on table cloths. *May.* B. F. Phillips & Son, woollens, incorporated under name of Phillips Woollen Co.; capital stock \$50,000. *July.* Butler & Son leased property for purpose of starting grist mill.—Plunkett Cotton Mill ran but four days a week. *August.* Mills of Renfrew Manufacturing Co. closed for a week.—Linnett Shirt Co. shut down indefinitely.—L. J. Follett & Sons, lime, began building two new kilns, capacity 1,400 barrels each. *September.* Adams Bros. Manufacturing Co.'s cotton warp mills shut down for two weeks to put in two new water wheels.—Plunkett Mills shut down indefinitely.—L. L. Brown Paper Co. equipped plant with sprinklers and other fire apparatus.—Berkshire Cotton Manufacturing Co. posted notices in mills of reduction in wages to take effect in October.—Renfrew Manufacturing Co. and L. L. Brown Paper Co. purchased 1,000 gallon pump to be used in supplying water for the paper and gingham mills.—Linnett Shirt Co. resumed operations after two months' suspension. *October.* Renfrew Manufacturing Co., gingham, ran but three days per week.—L. L. Brown Paper Co. shut down two weeks for repairs.—Adams Bros. Manufacturing Co. ran overtime in all departments.—New dynamo placed in Renfrew Manufacturing Co.'s mill No. 5.—W. C. Plunkett & Sons resumed business after partial shutdown of six weeks. *November.* Linnett Shirt Factory purchased by W. C. Plunkett & Sons; to be known as Greylock Shirt Co.—Berkshire Cotton Manufacturing Co. ran on full time.—Renfrew Manufacturing Co. reduced wages.

**Amesbury.** In January, Briggs Carriage Co. resumed operations after brief shutdown for inventory.—Cutters at Amesbury File Works worked evenings.—A 15 horse power motor set up in Lockwood & Brown's wheel factory.—M. B. Thornton bought business of A. L. Walsh Manufacturing Co.—Carriage and repair shop of Thomas Granigan damaged by fire. *February.* Machine plant of T. D. Parry & Co. sold at auction. *March.* New England Chemical Co. established. *April.* Trimming department at Amesbury Hat Factory enlarged.—Mill of A. W. Bartlett destroyed by fire. *May.* Repairs and improvements made at W. G. Ellis & Sons' car shop. *June.* Partnership of Adams & Pettingill, shoes, renewed and continued from June 30, 1893, to July 1, 1895.—Amesbury Electric Light, Heat, and Power Co. increased capital \$10,000. *August.* G. H. Elkins began manufacture of patent carbonized chimney caps, etc.—Hamilton Woollen Co. resumed operations after week's shutdown.—Merrimac Hat Co. started up after two weeks' shutdown. *September.* Ellis Car Works resumed operations.—Bottling establishment of Geo. Phillips destroyed by fire. *October.* Hamilton Woollen Co. started up on full time, with reduction in wages.—Edward

H. Sargent, carriages, died, aged 44 years. *November.* Dennett & Clark, carriages, employed no workmen during October and November.

**Amherst.** In April, Chandler & Pease, machinists and steel engravers, dissolved partnership; business continued by Edwin Pease. — Grist mill of H. M. Whitaker destroyed by fire. *July.* G. B. Burnett & Son and the Hills Company closed their hat factories for the summer; resumed operations in October. *August.* Levi Dickinson completed new storehouse at his box factory.

**Andover.** In February, H. H. Church and W. S. Donald formed partnership for manufacture of printers' ink; business to be conducted at works of W. C. Donald & Co. *May.* Smith & Dove Manufacturing Co. put in new boiler. *July.* New machinery added to Marland Woollen Mills. *August.* Tow department of Smith & Dove Manufacturing Co.'s mill shut down indefinitely. — Factory of Craighead & Kintz Manufacturing Co. started in part with 100 hands. — Bradlee's Woollen Mill resumed operations after two weeks' shutdown. — Smith & Dove Manufacturing Co. began erection of new boiler and engine house. *September.* Marland Woollen Mills resumed operations after shutdown. — Tailoring establishment of Jos. M. Bradley destroyed by fire. *October.* Flax department in Smith & Dove Mills resumed operations in full. *November.* F. L. Case Paper Co. added new drying machine.

**Arlington.** In December, strike occurred among employes of C. J. Raymond & Co., show-cases.

**Ashburnham.** In January, R. J. Brooks changed location of his basket manufactory. — Whitney's cane shop shut down for a few weeks. *June.* Chandler & Hutchins burned out.

**Ashland.** In September, T. A. Whicher & Co., boots and shoes, started up.

**Athol.** In February, new saws and automatic matcher placed in H. H. Rice's box factory. — C. G. Allen & Co.'s mill damaged by bursting of grindstone. — Tank erected on roof of Hill & Greene's new shoe factory as part of new fire protecting apparatus. — Work begun on addition to Bates Bros.' wallet shop. *March.* L. S. Starrett, tools, bought half interest in manufacturing plant of F. J. Gay of Providence, R. I., maker of milling and forming cutters. — Miller's River Manufacturing Co. took possession of new office building. — Shops of Geo. S. Brewer, wooden boxes, destroyed by fire. *April.* Lewis Sanders, kits and kegs, increased force to 90 men. — Sherwood Bros. removed steam mill to new site between Petersham and Barre. — G. S. Brewer began rebuilding burned box mill. — New machinery set up in Ellis & Son's sash and blind factory. — Water wheel at Bennett & Van Valkenburg's cotton mill repaired and operations resumed. — D. E. Tebo's satinet mill destroyed by fire; to be rebuilt. *May.* Swift & Co. began erection of cold storage plant. *August.* Factory of C. M. Lee, shoes, shut down in order to put in 150 horse power engine. — Bates Bros. shut down wallet shop for three weeks. — L. S. Starrett, tools, resumed operations with reduction in wages. *September.* C. M. Lee started up after a shutdown of five weeks. — Break in machinery at Ellis & Son's factory repaired and operations resumed. — Extension begun to King Bros.' shoddy mill and new machinery added. — New steel smoke stack placed in position at Bates Bros.' wallet factory. *October.* Bennett & Van Valkenburg, cotton warp, started up on full time. *November.* Lewis Sanders' saw and stave mill damaged by fire. — King Bros. completed addition to shoddy mill. — D. E. Tebo began erection of new four set mill. — L. S. Starrett, tools, doubled capacity of factory and added new machinery. *December.* M. L. Lee & Co.'s shoe factory shut down. — L. S. Starrett, tools, completed new addition to plant; building 160 x 40 feet, four stories, with extension 70 x 44 feet.

**Attleborough.** In January, Hebron Manufacturing Co. purchased \$40,000 worth of machinery for carding department. — Home Bleachery & Dyeing Co.'s buildings destroyed by fire. *February.* Work begun on foundation of new factory for W. H. Wilmarth & Co., jewelry; to be of wood, 200 x 40 and 750 x 27 feet, two stories. — Mossberg Manufacturing Co. leased shop and purchased plant of Walcott & Draper. *March.* Manufacturing jewelry business of Wilmarth, Holmes, & Co. purchased by G. F. Pierce and F. L. Torrey; business to be conducted at same place and firm name not to be changed for present. — New pumping apparatus in water works started up for first time. — New engine set up in Bates & Bacon's watch case factory. *April.* Addition made to factory of J. M. Bates. *May.* Repairs made at E. A. Robinson's jewelry manufactory. *June.* Regnell, Bigney, & Co., jewelry, employed additional female operatives. — Wool scouring establishment of Lithendale & Co. destroyed by fire. *July.* Bates & Bacon, jewelry, ran overtime to keep orders filled. *August.* E. A. Robinson's power

house resumed operations, damaged boiler having been repaired. — Cotton mills of Hebron Manufacturing Co. shut down indefinitely. — Slade & Whipple completed addition to their refinery. *September.* Break in engine at Hebron Manufacturing Co.'s mill caused brief shut-down for repairs. — Improvements made about Gold Medal Braid Co.'s factory. — Mossberg Manufacturing Co. removed machinery to new quarters in Bates Building. — W. H. Wilmarth & Co. started up new jewelry factory with 150 hands. *November.* Elmwood Manufacturing Co. established to manufacture baking powder. — B. B. & R. Knight made improvements about mills. — Attleborough Machine Co. continued overtime work. — Mossberg Manufacturing Co. occupied new factory.

**Auburn.** In August, John Warren & Sons, tanners, burned out.

**Avon.** In January, Williams, Kneeland, & Co., shoes, of Braintree, who were burned out in September, 1892, returned to that place, factory having been rebuilt. *November.* Avon Shoe Co. established to manufacture boots and shoes, succeeding J. B. Lewis Co. and Henry Tucker.

**Ayer.** In March, plant of Ayer Furniture Co. sold to Western parties; to be located elsewhere. *June.* Nashoba Manufacturing Co. began erection of new mill, 160 x 50 feet, for manufacture of a new mordant; to be operated by water power.

**Barre.** In May, woollen mills of Crossly Manufacturing Co. destroyed by fire; to be rebuilt.

**Bellingham.** In January, new looms added to Caryville Woollen Mill. *August.* Scarcity of water caused brief shutdown of Norfolk Woollen Mill. *September.* Satinet department of Caryville Mill shut down. — Ray Woollen Mills started up with reduction in wages paid to weavers. *November.* Caryville Woollen Mill started up after shutdown of eight weeks. — Ray Woollen Mills reduced running time. — Steam saw mill of Thomas G. Thain resumed operations.

**Berlin.** In July, John H. Parker's shoe factory closed for a few weeks.

**Beverly.** In January, Woodbury Bros. took possession of new factory. — Seth Norwood Shoe Co.'s factory started up after shutdown for inventory. — R. Keddie changed location of his carriage trimming establishment. *February.* C. S. Batchelder established to manufacture shoes. — Motive power in stair factory of Harry St. Clair changed from steam to electricity. — Flint, Lunt, & Co. established to manufacture shoes. — *Beverly Times* building destroyed by fire. — Strike occurred among employes in J. F. Carter & Co.'s oil clothing works. *March.* Board of Trade Building Association decided to erect five-story brick shoe factory, 110 x 40 feet, to be occupied by Millett, Woodbury, & Co.; completed in April. — Geo. Fuller, shoes, admitted F. H. Downs and name changed to Geo. Fuller & Co. — Machinery in factory of late firm of Creesy & Obear, shoes, sold and removed to North Baltimore, Ohio. — Woodbury Bros. put in 10 lasting machines. *April.* Carr & Spencer Bros. formed to manufacture shoe stock. — Smith & Dixon, machinists, added new machinery for doing heavy work. — Tuck & Hassett, shoes, enlarged cutting room. *June.* Raymond & Mæder and Foster Bros., shoes, consolidated their business. — Fires for month: Isaiah S. Kenny's heel cutting shop, A. P. Thissell's shoe factory, and Mrs. M. E. Walters' stitching room. *July.* Frank Woodbury's shoe factory shut down indefinitely. — J. H. Baker & Co. started up shoe factory. — Establishment of M. A. Kenney & Co., heels, damaged by fire. *September.* W. C. Morgan retired from firm of Clark Bros. & Morgan, shoes. *October.* Lynch Bros., morocco, purchased Nevins Bagging Co.'s plant at Salem; to remove business to that city. — Beverly Carriage Co. began to remodel its building. — Tuck & Hassett, shoes, shut down for one month. *November.* Conway & Co., taps and strip leather, established. — I. M. Munroe, Marblehead, leased Masters & Walker's shoe factory and removed plant to this place. — Tuck & Hassett, shoes, dissolved; business continued by D. J. Hassett & Co. — Hobbs & Smith organized to manufacture heels. — Consolidated Lasting Machine Co. resumed operations. — Fires for month: Melville E. Gray's saw-mill and morocco manufactory of McGowan & Dolan. *December.* Frank Woodbury, shoes, shut down.

**Billerica.** In June, capacity of Talbot Woollen Mills enlarged. *August.* Talbot Woollen Mills shut down for two weeks. *September.* Mills of Faulkner Manufacturing Co. shut down for two weeks. — Talbot Woollen Mills resumed operations. *November.* Faulkner Manufacturing Co. resumed operations.

**Blackstone.** In January, cigar manufactory of Samuel Fairbrother destroyed by fire. *February.* New creels placed in spinning frames at Blackstone Manufacturing Co.'s cotton mill. — Improvements made about Lawrence Felting Co.'s mill. *March.* Strike occurred among dresser tenders in Blackstone Woollen Mill. *April.* Woonsocket Rubber Co. voted to go into rubber combination known as United States Rubber Co. — Lawrence Felting Co.'s mills shut down one week for repairs. *May.* Lawrence Felting Co. and Woonsocket Rubber Co. obliged to suspend operations on account of high water. — New shafting set up in No. 1 mill of Blackstone Woollen Co. — Storage shed of Blackstone Woollen Co. destroyed by fire. *June.* New woollen mill of Spencer & Davis started up. — No. 1 mill of Blackstone Woollen Co. resumed operations on Summer time schedule. — Blackstone Manufacturing Co. put in new patent slubbing machine which coils the roving in cans instead of winding on spools. *July.* Blackstone Manufacturing Co. sank artesian well in mill yard for water for drinking purposes. — Evans, Seagrave, & Co. closed woollen mills. — Foundation started for vulcanizing rubber factory, 200 x 46 feet, for Woonsocket Rubber Co. *August.* H. T. Merriam's new foundry plant started up for first time. — Work begun on addition to Lawrence Felting Co.'s mill. — Lawrence Felting Co. and calender rooms of Woonsocket Rubber Co. resumed operations. *September.* No. 1 mill of Blackstone Woollen Co. ran but three days a week. — Blackstone Manufacturing Co. gave notice of reduction in wages, to take effect September 25. — Blackstone Manufacturing Co.'s cotton mills shut down for one week on account of low water. *October.* Blackstone Cotton Mill ran overtime to make up for time lost on account of low water. *December.* New boilers set up in Lawrence Felting Co.'s mill. — Blackstone Cotton Mill ran on short time owing to low water.

**BOSTON.** [City Proper.] In January, Excelsior Umbrella Manufacturing Co. merged into The Umbrella Co., with headquarters in New York City. — Charter of incorporation granted to Brown Electric Co.; capital stock \$10,000. — Hills, Turner, & Co., Lambert Bros., and R. Sherburne, glass manufacturers, formed a syndicate to be known as Boston Plate and Window Glass Co.; capital stock \$600,000. — Kearney-Cutten Dressing Co., leather dressing, established. — Strike occurred among employes of Israel Friedman. — Fires for month: Walker & Pratt Manufacturing Co., stoves and furnaces; Ashton Valve Co.; Emil Meyer, pomade; and Morris, Dean, & Co., clothing. *February.* G. W. & F. Smith's machine shops leased for term of years to Augustus P. Martin of Lynn, for manufacture of boots and shoes. — Co-partnership existing under name of Kohler Furnace and Steam Heating Co. dissolved; succeeded by limited co-partnership under same name. — New companies established: Puritan Manufacturing Co., shoe machinery, capital stock \$26,000; Hatch Wall Flashing Co., metal flashings, capital stock \$5,000; Curtis & Pope Lumber Co., capital stock \$140,000. — Fires for month: Building occupied by A. W. Clapp, boots and shoes; Geo. F. Daniels & Co., slippers; Simons, Hatch, & Whitten, woollen underwear; Winthrop Square Clothing Manufacturers; Stearns Stool Co.; C. P. Riley & Co., woollen and worsted machinery. *March.* Foundation begun for new manufacturing building for C. L. Hawthaway & Sons; buff brick, granite, and terra cotta, 100 x 40 feet, five stories. — New corporations established: G. W. Dows Co., soda water apparatus, capital stock \$30,000; G. M. Corbett Co., furniture and novelties, capital stock \$6,000; Sander Musical Instrument Co., capital stock \$30,000; Tubular Rivet & Stud Co. — J. H. Thomas, formerly of Gardner & Thomas, Haverhill, opened factory for manufacture of men's embroidered slippers. — Fires for month: Lariat Manufacturing Co.; Day, Callaghan, & Co., cloaks; Richardson, Howe, & Lovejoy, ladies' wrappers; David Knox & Son, shoe machinery; J. H. Fitz, ladies' wrappers; A. L. Perkins & Co., shoe tools; S. B. Rogers & Co., leatheroid trunks and bags; Globe Buffer Co.; Flagg Manufacturing Co.; Walter S. Barnes, boxes; and Baxter, Stoner, & Schenkelberger, cut soles and taps. — Strikes for month: Garment pressmen employed by Contractor Rosenberg; Employes of Hall Carriage Co., A. C. Judkins & Co., A. M. Wood Co., Ferd. F. French & Co., Hiram Nash, and D. P. Nichols & Co., carriages; and 350 plasterers' tenders. *April.* Swain-Fuller Manufacturing Co. removed to new quarters. — Amasa W. Bailey, billiard tables, died, aged 73 years. — S. O. Aborn, hatter, stopped manufacturing; no successor. — Strikes for month: Employes American Automatic Fire Alarm Co.; West End R.R. Co. (carpenters); Edison Electric Light Co. (wiremen); and carpenters, lathers, riveters, and boilermakers employed by various firms. — Fires for month: Standard Cordage Co., Everett Specialty Manufacturing Co., and Weiss & Schmidt. *May.* J. D. & M. Williams succeeded by Otis E. Weld & Co. — National Cordage Co. decided to increase preferred stock \$2,500,000. — Walter S. Barnes, paper boxes, leased new rooms. — Boston & Bay State Die Co., cutting dies and raw hide mallets, purchased by J. E. Farrar, formerly of Danvers; business continued under same name. — Whittemore, Woodbury, & Co., leather dressing, succeeded by Whittemore-Woodbury Co., incorporated. — New companies established: Hoxie Mineral Soap Co., capital stock \$6,000; Perkins, Joyce, & Co., boots and shoes; Warner Boot & Shoe Co., capital stock \$125,000; The Frank Shoe Co., capital stock \$75,000. — Day, Callaghan, & Co.,

cloaks, removed to New York City. — Strikes for month: Employés of Ingalls & Kendrick, steam fitters, and L. E. Merry, baker. — Fires for month: Boston Brass Works and Ashton Valve Co. *June.* Beach & Clarridge Co., flavoring extracts, acids, etc., incorporated; capital stock \$60,000. — Geo. K. Paul & Co., brass and iron goods for steam, water, and gas purposes, leased two buildings for long term. — Erection of box factory begun by Geo. H. Dickerman; brick, two stories. — New firms established: Kennedy & Auerbach, dongola manufacturers; Boston Enterprise Manufacturing Co., machinery, etc., capital stock \$23,000; Voorhees Electrical Co., electrical appliances, capital stock \$5,000; Berlin Falls Fibre Co., chemical fibre, wood pulp, etc., capital stock \$400,000. — Strike occurred among employés of Contractor Rothman. — Fires for month: E. F. Pierce & Co., chairs, and Herman Flick, paper boxes. *July.* Work begun on factory for S. D. Hicks & Son; to be of pressed brick, iron, and copper, 75 x 70 x 60 feet, five stories. — Cigar factory of Miller & Dendron destroyed by fire. *August.* Fisher Axle Co. began manufacturing. — Wm. S. Blake, of Blake Bell Co., died, aged 75 years. — Office of treasurer of Washington Mills Co., Lawrence, removed to this city. — Derby & Kilmer Desk Co. consolidated with Pond Desk Co.; continued as Derby, Kilmer, & Pond Desk Co. — Boston Belting Co. completed for Linden Paper Co., Holyoke, one of the widest rubber belts ever made in this country. *September.* Pope manufacturing building equipped with safety elevator gate. — Strikes for month: Plymouth Rock Pants Co. (cutters) and employés of Seth W. Fuller, electrical construction. *October.* George B. Hardy, doors, sashes, and blinds, died, aged 68 years. — Strikes for month: Rand-Avery Supply Co. (cylinder feeders) and Boston Telegram Co. (printers). — Fires for month: J. H. Roberts & Co., machinery; A. Cohen & Co., ladies' underwear; Derby, Kilmer, & Pond Desk Co.; and Boston Wrapper Manufacturing Co. *November.* A. M. Wood Co., carriages and wagons, shut down one month owing to fire. — Hugh Campbell Co. incorporated to manufacture shoe findings. — Lang & Jacobs Co. established to manufacture cooperage articles; capital stock \$5,000. — J. W. Kennan Co. incorporated to manufacture leather; capital stock \$40,000. — E. F. Delaney, shoe knives, moved business from Framingham to this city. — Strikes for month: Employés of G. C. Dunklee & Co. and other tin plate and sheet iron workers. — Fires for month: Winslow T. Page & Co., slippers; Rosaney Manufacturing Co.; J. E. Wall, bamboo goods; A. M. Wood Co., carriages and wagons; Johnson & Glover, papier maché goods; Webster Dress Form Manufacturing Co.; New England Chemical Co.; and Franklin Typewriter Manufacturing Co. *December.* Geo. H. Davis began manufacture of leggings and over-garters. — Boston Oregon Mast Co. organized to manufacture masts and other woodwork; capital stock \$30,000. — Quimby Brush Co. established to manufacture machine brushes. — Fires for month: Guindon & Durant, coppersmiths; Elisha Betts, stairs; Timothy Wilson, cases; Bosch & Goldstein, caps; F. Schwender, clothing; Morris I. Cohen, caps; Henners Bros., clothing; Boston Chair Co.; M. W. Cain & Co., furniture; G. W. Bent, spring beds; and Standard Wire Mattress Co.

[Brighton.] In March, strike occurred among employés in Bowker Fertilizer Works.

[Charlestown.] In October, manufacture of shirts begun at State Prison. — John C. McManus, sailmaker, died. *December.* Osgood & Hart's iron foundry damaged by fire.

[Dorchester.] In December, Darius Eddy, refrigerators, died, aged 84 years.

[East Boston.] In March, strike occurred among employés of P. Healey, carriages. *April.* Finishing department of Boston & Lockport Block Co., shipblocks and pulleys, damaged by fire. — Strikes for month: employés of Wm. Gilchrist, Sr., carriages, and blacksmiths and boiler-makers employed by Atlantic Works, E. Hodge & Co., and Lockwood Manufacturing Co. *August.* Strike occurred among employés of Bardwell, Anderson, & Co., furniture. *November.* New building completed at Atlantic Works and new machinery added.

[Jamaica Plain.] In January, Benj. M. Wedger, fireworks, died, aged 65 years; manufacturing business discontinued by heirs. *June.* Strike occurred among employés of Sturtevant Blower Co. *August.* Wages of moulders at Sturtevant Blower Works reduced. *October.* Employés in Sturtevant Blower Works suspended owing to depression in business.

[Neponset.] In December, Putnam Nail Works destroyed by fire.

[Roslindale.] In October, Williams Manufacturing Co. began manufacture of surgical instruments. — Frampton's morocco factory resumed operations in full.

[Roxbury.] In January, Albert Howard, general manager of E. Howard Watch & Clock Co., died, aged 60 years. *February.* Excavation begun for addition to Smith & Engle's brewery; brick and iron, 45 x 52 feet, three stories. *March.* Foundation begun for picture frame factory for T. W. Norman; brick, 100 x 40 feet, two stories. — Strike occurred among employés of J. P. & W. H. Emonds and John A. Scott & Son, carriages. *May.* Mills of Roxbury Carpet Co. shut down on account of dissatisfaction among employés as to hours of labor. *June.* New England Piano Co.'s factory shut down in part to repair steam box. — Excavation begun for factory for Eastern Electric Cable Co.; brick and freestone, 37 x 59 x 108 feet, three stories. — Strike occurred among teamsters of Continental Brewery. *August.* New England Piano



Co. closed for repairs. *September.* Roxbury Carpet Co. shut down for one month owing to lack of orders. — Pearson Cordage Co. enlarged plant by addition of 1,000 horse power engine. — New department for drop forging added to plant of Trimount Manufacturing Co. — Erection of new thread and twine factory for E. J. W. Morse & Co. of Easton begun; brick, 134 x 50 feet, four stories. *October.* Strike occurred among employes of American Brewery Co. and New England Piano Co. — Roxbury Carpet Co. ran on quarter time. *November.* O. F. Grant established manufacture of electrical goods. — Roxbury Carpet Mills shut down. — Strike occurred among employes of G. S. Guyer & Co., hats. *December.* Roxbury Carpet Co. resumed operations with small force.

[South Boston.] In January, Wimple Bar Shoe Co. removed plant to Lawrence. — Sunderland & Ogden's file factory damaged by fire. *February.* Bay State Iron Co. sold out. *March.* Strike occurred in spinning room of Boston Cordage Co., and among employes of P. McMurray, carriages. *April.* Camphor refining establishment of West, Jenney, & Co. damaged by fire. — Strikes for month: Boilermakers employed by R. Minton & Co., Cunningham Iron Works, James Russell Boiler Works, and City Point Iron Works. *May.* Boston Shoe Manufacturing Co. established. *June.* Strike occurred among employes of Moore & Wyman, machinists. *July.* Erection of factory begun by Barber Asphalt Paving Co.; corrugated iron, 87 x 87 feet, one and two stories. — Foundation of machine shops for A. & J. M. Anderson started; brick and iron, 75 x 125 and 60 x 105 feet, one story. *August.* One of the machine shops of Bay State Iron Co.'s plant damaged by fire. — Wrought Iron Casting Co. shut down and business discontinued. *October.* Towne Manufacturing Co. moved plant to Kennebunk, Me. — Strike occurred in John Dodowski's tailoring establishment.

**Bradford.** In March, Alfred Ordway, shoes, died, aged 81 years. *July.* Shoe factory of Knipe Bros. closed indefinitely. *December.* Plans drawn for L. W. Larkin's heel factory; to be of wood, 125 x 30 feet, one story.

**Braintree.** In January, Braintree Wood & Lumber Co. resumed operations. — Williams, Kneeland, & Co., shoes, started up in new factory. *February.* B. H. Woodsum Co. established to manufacture nails, etc.; capital stock \$15,000. — Strike occurred among coat makers in Columbia Rubber Co. *May.* W. S. Soule & Co., rawhide trunks, removed to Brockton.

**Bridgewater.** In February, Richard W. Cone & Co., shoes, formed limited partnership; capital \$5,000. *April.* Bridgewater Paper Co.'s mill ran overtime. *November.* Eagle Cotton Gin Factory resumed operations.

**BROOKTON.** In January, Herbert & Rapp Co. changed to Hub Gore Makers, and absorbed the factory of Dean, Chase, & Co., Rockland, and the shoe gore department of T. Martin & Bro. Manufacturing Co. of Chelsea. — G. G. Snow, shoes, began work on addition to factory. — Terry, Ware, & Alley, boots and shoes, built water tank upon roof of factory. — Co-partnership between Jas. & Chas. J. Means dissolved, and new partnership formed by C. J. Means and F. W. Elms under name of Means & Co. — Moyer, Habig, & Dolan, boots and shoes, leased portion of old Douglas shoe factory. — T. D. Barry & Co., shoes, began work in new factory. — Monarch Rubber Co. bought out Norfolk Rubber Co. of Stoughton; to remove machinery to this city. — Cutters and stitchers at Standard Rubber Works began work. — Additions completed to shoe factories of Edwin Keith, C. S. Pierce, and Churchill & Alden. — Capacity of N. C. Ruberg's steel shank factory doubled. — Albion H. House established to manufacture shoe stays. — Factory of E. L. Bonney, shoe boxes and packing cases, damaged by fire. *February.* T. A. Norris Machine Co. moved into new office building. — New twin treeing machines placed in W. L. Douglas Shoe Co.'s factory. — Terry, Ware, & Alley added four new lasting machines and equipped factory with automatic sprinklers. — Howard & Foster, shoes, made improvements and increased facilities. — Another addition built to Churchill & Alden's shoe factory. — Work begun on new factory, 65 x 30 feet, for J. E. Peckham & Co., shanks. — R. B. Grover & Co., shoes, started up after stocktaking. — M. Burns established to manufacture shoes. — McCarthy, Sheehy, & Kendrick Co., shoes, incorporated; capital stock \$20,000. — Strike occurred among mackintosh makers in Standard Rubber Works. *March.* Reynolds, Drake, & Gabell decided to build addition to shoe factory. — Niles & Wilbar added new lasting machines. — Work begun on foundation of a new brick shoe factory. — Churchill & Alden, shoes, shut down for three days while moving into new addition. — E. R. Laird & Co. added several pasteboard shank machines. — Barrows Shoe Co. discontinued business. — Shoe factory of Enos H. Reynolds damaged by fire. *April.* Dorey & Lachapelle began erection of foundry building, 80 x 35 feet, for manufacture of gray-iron machinery castings. — Shoe box manufacturers formed combination for regulation of prices. — Enos H. Reynolds completed repairs on factory and resumed operations. — Woodward & Wright, lasts, added new machinery. — Work begun on new factory for Brockton Last Co.; wood, 200 x 35 feet, four stories.

**May.** O. A. Miller's plant for manufacture of shoe treeing machinery completed; main building of wood, 100 x 35 feet. — Brockton Iron & Brass Foundry resumed operations. — W. S. Soule & Co., formerly of South Braintree, removed rawhide trunk factory to this place. — Geo. V. Scott added new room to machine shop and set up new machinery. — Foundation started for A. M. Herrod & Co.'s new shoe factory; wood, 200 x 35 feet, four stories. **June.** Fast Black Co., blacking manufacturers, incorporated; capital stock \$10,000. — Phinney & Richardson, shoes, shut down indefinitely. — I. P. Gayner began manufacture of shoe stays as successor to Brockton Stay Co. **July.** Tack works of W. W. Cross & Co. destroyed by fire; to be rebuilt. — Smith & Wade, shoe trimmings, enlarged plant by new building 100 x 37 feet. — L. C. Bliss & Co. made improvements and added new machinery to shoe factory. — M. P. Clough & Co., shoes, removed plant to factory formerly occupied by Emerson, Weeks, & Co. — G. E. Keith's shoe factory started up. — J. M. O'Donnell & Co. started up their enlarged shoe factory. — Tuck Manufacturing Co., shoe tools, built new tempering department at plant. — Theodore Cushing, boxes, sold out to E. L. Bonney. **August.** Factories of P. B. Keith and Churchill & Alden shut down for one week. — Bouvé, Crawford, & Co.'s No. 1 shoe shop ran on half time. — Habig & Dolan, boots and shoes, dissolved. — W. W. Cross & Co., tacks, secured Wheeler Mill for use during rebuilding of their burned factory. — A. M. Herrod & Co. occupied new shoe factory. — McCarthy, Sheehy, & Kendrick Co. occupied new factory. **September.** Whitman & Keith, shoes, resumed operations. **October.** Perry & Elkins, shoes, removed to larger quarters. — Thompson Bros.' shoe factory shut down for one week. — Addition built to Monarch Rubber Works. **November.** Thomas White & Co., shoes, removed to Holbrook. — Edwin Keith, boots and shoes, succeeded by E. & L. C. Keith; special capital \$10,000. **December.** Lilley, Brackett, & Co. leased Phinney & Richardson's factory. — Monarch Rubber Co. shut down for repairs on engine. — A. H. Sonneman & Co. established manufacture of boots and shoes. — H. W. Field & Co. established manufacture of shoes. — Reduction of wages made in factories of L. M. Reynolds, Stacy, Adams, & Co., and Geo. E. Keith. — Committee appointed to procure subscriptions for retention in this place of Leonard & Shaw, shoes, obtained required amount. — Shoe shipments for 1893 as compiled by *Brockton Enterprise* were 422,053 cases against 428,241 cases in 1892, a decrease of 6,188 cases, or 1.44 per cent. These figures do not include the output of the factory of Reynolds, Drake, & Gabell, which is shipped from Easton. Neither do they include the number of single pairs sent out by express or mail or sold at the factories, amounting in all to about 3,500 cases. The following table shows the shipments for the past eleven years :

YEARS.	Cases	YEARS.	Cases	YEARS.	Cases
1883, . . .	290,054	1887, . . .	383,404	1891, . . .	429,582
1884, . . .	326,858	1888, . . .	422,282	1892, . . .	428,241
1885, . . .	333,980	1889, . . .	433,452	1893, . . .	422,053
1886, . . .	361,584	1890, . . .	469,607		

**Brookfield.** In January, work begun on foundation of shoe factory for C. H. Moulton & Co.; building to be 250 x 50 feet, four stories with basement. — Employees of Union Woollen Co.'s mill notified that mill would shut down indefinitely. **March.** East Brookfield Woollen Co. ran nights. — Two new turning machines set up in G. H. Burt & Co.'s shoe factory. **April.** East Brookfield Woollen Co. ran on regular time; at no time after this month was the entire plant in operation. — The old Forbes wheel factory prepared for Standard Molded Counter Co. **May.** Work begun on new storehouse for East Brookfield Woollen Co. — Brick mill recently occupied by Union Woollen Co. leased for term of years by Geo. Mann & Bro. of Leicester; to be known as the Otsego Mill. **June.** Sagendorph Mills shut down. **July.** Charter of incorporation granted to Brookfield Shoe Co.; capital stock \$15,000. **August.** Sagendorph Mills, fancy cassimeres, ran but four days a week. — Bradford Yarn Mill shut down; started up again in November. **September.** Improvements made about stitching room in G. H. Burt & Co.'s shoe factory. — Sagendorph Mills shut down entire months of September and October. **October.** Geo. Mann & Bro., satinet, resumed operations. — East Brookfield Woollen Co. put in two extractors of increased capacity. **November.** G. H. Burt & Co. began manufacture of calf boots. — Sagendorph Mills started up to run out stock. — Brick works shut down. — C. H. Moulton & Co., shoes, occupied new factory. — Sagendorph Mills shut down for a few days to add new flume. **December.** Sagendorph Mills shut down entire month.

**Brookline.** In March, strike occurred among employes of M. W. Quinlan, carriages. *August.* Strike of 200 laborers of Brookline Gas Co. occurred. *October.* Brookline Gas Co.'s new water gas plant completed; capacity, 3,000,000 cubic feet of gas per day.

**CAMBRIDGE.** In January, Charles River Rubber Co. purchased site for new mill for manufacture of gossamers. — Fires for month: Soap factory of Lysander Kemp & Sons and sausage factory of John J. Rogle. *March.* Goepper Bros., cooperage, incorporated as Goepper Bros. Company; capital stock \$30,000. — Jas. A. Maynard, one of the original founders and incorporators of the Atlantic Works of East Boston, died, aged 74 years. — Strikes for month: Carriage workers employed by Hugh Stewart, Stewart Bros. & Co., Chas. Waugh & Co., and Nelson Carriage Co. *April.* Nine-hour day without reduction of wages granted to employes of Barbour, Stockwell, & Co. — Francis Ivers, of Ivers & Son, carriages, died, aged 72 years. — Strikes for month: Boilermakers employed by Edward Kendall & Sons, William Campbell, Roberts Iron Works, and Cambridge Boiler Works. *May.* Chas. P. Keith, brooms, discontinued manufacturing. — Work begun on new factory for Charles River Rubber Co.; building to be of wood, 60 x 60 and 30 x 150 feet, two stories. — Boston Consolidated Brick Co. formed by Parry Bros. & Co., M. W. Sands, and Bay State Brick Co., for purpose of controlling output of building brick in vicinity. — Fires for month: Candy factory of Geo. Close and at American Rubber Works. — Strike occurred among employes of David Wilcox & Co. *July.* Mason & Hamlin's organ and piano factory shut down for three weeks. — Work begun on factory for Damon Safe Works; to be of wood, 27 x 30 feet, two stories. — Work of excavating begun for storage building for A. H. Hews & Co., pottery; to be of wood, 41 x 106 feet, three stories. — Excavation begun for hat factory for David Wilcox & Co.; to be of wood and brick, 30 x 40 feet, two stories. *August.* Eighty of the 350 men employed by Blake Pump Works returned to work at reduced wages after week's shutdown. — American Rubber Works resumed operations. *September.* Boston Woven Hose & Rubber Co. increased capital \$250,000. *October.* Additions and improvements completed at oil factory of Alden Spear's Sons & Co. — K. J. Quinn, manufacturer of coloring and polishing materials for shoes, removed to Boston. — Fires for month: Coco-Coffee Co., carpenter shop of B. & M. R.R., and carriage factory of Chas. Waugh & Co. *November.* Foundation started for new factory for Jas. H. Roberts & Co. machinery; to be of wood, 75 x 100 feet, three stories.

**Canton.** In January, American Net & Twine Co. made improvements about plant. *April.* American Net & Twine Co. added new machinery. *May.* Additions made to knitting mills of Draper Bros. Co. and new engine set up. *July.* Eureka Silk Mills Nos. 2 and 3 resumed operations. — Rolling mill in Kinsley Iron & Machine Co.'s works shut down for repairs. — G. H. Mansfield & Co., silk braid, shut down for month. *August.* Eureka Silk Co. ran mills only three days a week.

**Charlemont.** In June, C. E. Truesdell completed repairs on factory. *July.* Geo. Adams started up new shingle mill. *August.* H. A. Frary & Son's spool factory shut down for lack of orders; started up again in September.

**Charlton.** In May, Chaffee Bros. of Oxford bought machinery used in Grover's box shop and removed it to Oxford to be used for same purpose. — J. A. Chapman, satinets, built addition, 18 x 36 feet, two stories. *November.* Akers & Taylor's satinet mill ran four days per week.

**Chatham.** In March, Chas. A. Howes, sails, gave up manufacturing; no successor.

**Chelmsford.** In February, Sugden Press Bagging Co. of Lowell purchased site of Eagle Mills. *March.* Work begun on woollen mill for Sugden Press Bagging Co.; to be of wood, 30 x 70 feet, three stories. *August.* Building occupied by Beaver Knitting Co. and Novelty Knitting Machine Co. destroyed by fire; Novelty Knitting Machine Co. removed to Lowell. *September.* Geo. C. Moore's worsted mill resumed operations. — Chelmsford Foundry Co. compelled to shut down part of its works for first time in its history. — Beaver Knitting Co. occupied temporary quarters while rebuilding burned plant. *October.* Worsteds plant of Geo. C. Moore ran on half time.

**CHELSEA.** In January, plans completed for factory of Revere Rubber Co.; to consist of four buildings of red brick, one story each; dimensions of buildings 208 x 60 feet, 201 x 50 feet, 140 x 40 feet, and 130 x 22 feet. — T. Martin & Bro. Manufacturing Co. disposed of shoe goring department to Hub Gore Makers of Brockton. *February.* Contract awarded for erection of box factory for Atwood & McManus; to be 120 x 50 feet, two stories, with boiler and engine

room; lumber shed 220 feet long, and stable 24 x 36 feet. *March.* Revere Rubber Co. completed elevator belt 1,467 feet long, 4 feet wide, weight 10,000 pounds. — Drying room of Boston Rubber Co. damaged by fire. *June.* Foundation begun for new rubber factory for Boston Web & Gore Manufacturing Co.; to be of wood, 80 x 50 feet, two stories; completed in November. *August.* Chas. Henry & Sons, elastic web, and Geo. F. Slade, cigars, shut down. *November.* Boston Web & Gore Manufacturing Co. incorporated to manufacture shoe gorings and suspender webs; capital stock \$20,000.

**Chester.** In January, Wm. S. Gamwell's grist mill destroyed by fire, and rebuilt during summer; occupied in September. *March.* Mill of Grant Corundum Wheel Co. destroyed by fire.

**Chesterfield.** In November, Healy Bros., plane handles, resumed operations. .

**CHICOPEE.** In January, Taylor, Bramley, & Co. began putting in new machinery preparatory to enlarging capacity of knit goods factory. *February.* Dwight Manufacturing Co. added 86 spinning frames. *March.* Overman Wheel Co. shut down for a day owing to accident to boiler. — New knitting shops of Doten & Whitehouse, successors to Chicopee Falls Knitting Co., started up. *April.* Belcher & Taylor Agricultural Tool Co. erected new storehouse, 104 x 80 feet. — Lamb Knitting Machine Co. made improvements to plant. *July.* Overman Wheel Co. made repairs at factory. — Taylor, Bramley, & Co., knit goods, added seven knitting machines. *August.* Half the mills of Chicopee Manufacturing Co. shut down on account of low water. — Overman Wheel Co. resumed operations. — Stevens Arms & Tool Co. shut down one week for repairs. *September.* Dwight Manufacturing Co. shut down for two weeks throwing 650 persons out of employment. — Lamb Knitting Machine Co. and Belcher & Taylor Agricultural Tool Co. resumed operations. — Strike of weavers occurred at Dwight Manufacturing Co. *October.* Mills of Chicopee Manufacturing Co. shut down on account of low water. — Chicopee Manufacturing Co. added new wide looms. — Break in engine in factory of Belcher & Taylor Agricultural Tool Co. repaired and operations resumed. — Stockholders of Lamb Knitting Machine Co. voted to sell entire plant to A. G. Spalding & Bros. Spalding's skate factory at Newark, N. J., and gymnasium goods factory at Philadelphia, Pa., to be transferred to Chicopee Falls. — Dwight Manufacturing Co. started up handkerchief looms. — S. Blaisdell, Jr., cotton goods, and Doten & Whitehouse, knit goods, resumed operations. — Reduction in wages made by Overman Wheel Co. *November.* Belcher & Taylor Agricultural Tool Co. put in new engine. — Chicopee Manufacturing Co. resumed operations. — S. Blaisdell, Jr. Co. formed to manufacture cotton and woollen goods; capital stock \$5,000. — Mills 5 and 6 of Dwight Manufacturing Co. shut down. *December.* David M. Butterfield, paper, died, aged 75 years.

**Clinton.** In March, J. A. Needham purchased old electric light power station and started manufacture of absorbent cotton. — Clinton Wire Cloth Co. decided to light plant by electricity. *April.* Smith, Barr, & Co., linen thread, changed name to Worcester Thread Co. — Clinton Wire Cloth Co.'s mill destroyed by fire; to be rebuilt. *May.* First product of Needham Absorbent Cotton Works placed on market. — Eleven story tower of Clinton Wire Cloth Co.'s mill, left standing after the fire, blown up by dynamite. — Picker room of Lancaster Mills damaged by fire. *July.* J. B. Parker Machine Co. ran nine hours a day. — Lancaster Mills added three new spoolers. — Clinton Wire Cloth Co. began to rebuild mill; to be 293 x 80 feet, three stories. — Witherell Shoe Co. resumed operations. *August.* Gibbs Loom Harness & Reed Co.'s works resumed operations in full. — Dyehouse of Bigelow Carpet Mills ran only four days a week. — Weaving and finishing departments at Rodger's Worsted Mills shut down for two weeks. — Lancaster Mills ran on half time. — Witherell Shoe Co. shut down for two weeks. — New building, 14 x 9 feet, erected at Clinton Wire Cloth Co.'s works for storage of dies. *September.* Addition to perforating department of Clinton Wire Cloth Co.'s factory completed. — Lancaster Mills shut down for ten days. — Weaving and Axminster spinning and carding departments of Bigelow Carpet Mills closed indefinitely. *October.* Lancaster Mills resumed operations with reduced wages. — Bigelow Carpet Co.'s mills started up on short time. — Worcester Thread Co. moved all machinery and effects to Worcester. — Electric light plant put in mill of Clinton Wire Cloth Co. — Parker Machine Co. increased working time. — Clinton Wire Cloth Co. ran part of plant nights. *November.* Bigelow Carpet Mills shut down indefinitely. — Rodger's Worsted Mills ran eight hours per day. — Clinton Wire Cloth Co. completed new mill and reduced wages. *December.* Clinton Wall Trunk Co. ran full time. — No. 3 mill of Clinton Worsted Co. started up with reduction in wages. — Bigelow Carpet Co. began erection of new dry house. — No. 8 mill of Bigelow Carpet Co. resumed operations with reduction in wages.

**Cohasset.** In February, C. E. Tisdale started up his shoe factory.

**Colrain.** In September, Massacomet Yarn Mill resumed operations after shutdown of two weeks.      *October.* Griswoldville Manufacturing Co. resumed operations after shutdown.

**Concord.** In January, Damon Manufacturing Co. shut down woollen plant indefinitely, throwing 200 hands out of employment; started up to run out stock later in year, and in October shut down permanently.

**Conway.** In January, Brown & Woodward's cotton mill sold to Daniel Eldridge and Chas. Peck; manufacturing continued.      *July.* Repairs made and new machinery added to upper mill of Tucker & Cook Manufacturing Co.      *October.* Both factories of Tucker & Cook Manufacturing Co. ran five days per week with reduced force of employes. — Eldridge & Peck, cotton goods, dissolved, and mill closed; operations resumed in November by Eldridge Manufacturing Co.

**Cummington.** In January, work resumed at wood-turning establishment at Swift River.      *May.* New machinery set up in Chilson & Reed's factory. — Paper mill resumed operations after few weeks' shutdown.

**Dalton.** In May, work begun on foundation for Crane & Co.'s new paper mill; to be of brick, 271 x 209 feet, three stories. Dimensions of the several buildings to be as follows: Rag engine building, 105 x 40 feet; finishing building, 105 x 40 feet; tower, 23 x 25 feet; machine room, 146 x 53 feet; rag building, 82 x 44 feet; steam engine building, 56 x 42 feet; boiler house, 48 x 43 feet.      *July.* Kittredge Woollen Mill shut down for a month. — Repairs on engine at Crane & Co.'s paper mill completed and operations resumed.      *September.* Byron Weston Co. and Old Berkshire Mills, paper, resumed operations.      *October.* New firm, Burr & Soule, organized to manufacture children's shoes. — C. Glennon & Sons, woollens, shut down indefinitely. — Charles Parker's paint shop damaged by fire.

**Dana.** In July, picker room of Crawford & Tyler's woollen mill damaged by fire; work suspended in order to make repairs.      *August.* Crawford & Tyler's woollen mill resumed operations.      *September.* Saw mill and box shop of G. L. Johnson destroyed by fire.      *October.* Crawford & Tyler's woollen mill equipped with automatic fire extinguishers.

**Danvers.** In March, break in water main caused shutdown of all the shoe factories.      *April.* Nathaniel Glover & Co., shoes, burned out.      *May.* J. V. Hanson of J. V. & J. Hanson, grain milling, died, aged 65 years.      *June.* Charter of incorporation granted to Danversport Rubber Co.; capital stock \$10,000.      *September.* Danvers Rolling Mill resumed operations with full force of employes.

**Dartmouth.** In March, Eastern Fertilizer Co. purchased plant of Clark's Cove Guano Co.; in May overhauled boilers and made repairs preparatory to starting up.

**Dedham.** In March, United States Linen Co. removed to Medway. — J. V. Abbott Manufacturing Co. built addition, 34 feet long, to loom picker works.      *April.* Crook Bros., recently burned out at South Wrentham, resumed business in this town.      *July.* Extensive repairs made at Merchants Woollen Mill.      *August.* Upper dyehouse of Merchants Woollen Mill started up.      *September.* J. V. Abbott Manufacturing Co. shut down indefinitely. — New boiler cranks placed in F. E. Clapp & Co.'s factory.      *October.* Merchants Woollen Mill resumed operations on three days a week time schedule and with reduction in wages.      *December.* Merchants Woollen Mill started up on full time. — Merchants Woollen Mill damaged by fire.

**Deerfield.** In June, Wiley & Russell Manufacturing Co. shut down one week for vacation and inventory, and in October reduced wages.

**Dennis.** In March, West Dennis Shoe Co.'s factory sold at auction.

**Dighton.** In February, Century Foundry started up.      *August.* Co-operative Stove Foundry resumed operations.      *September.* New engine set up in Mount Hope Thread Mill.

**Douglas.** In May, Howe Factory, containing axe polishing and finishing departments of American Axe & Tool Co., destroyed by fire.      *August.* American Axe & Tool Co. resumed

operations. *October.* Entire forging department of American Axe & Tool Co. destroyed by fire; rebuilt in November. *November.* Douglas Woollen Mills started up after shutdown of several months.

**Dracont.** In January, woollen mill of Michael Collins started up. *February.* Six sets of new cards added to Collins Woollen Mill. *August.* Collins Woollen Mill shut down indefinitely. *September.* Collins Woollen Mill started up with full force after shutdown of four weeks. *November.* Collins Woollen Mill ran on short time.—Weaving and spinning departments of Merrimack Woollen Mills ran nights. *December.* Collins Woollen Mill ran 48 hours per week.

**East Bridgewater.** In April, Carver Cotton Gin Co. worked nights.

**Easthampton.** In April, Glendale Elastic Fabrics Co. added new machinery for manufacture of elastic goring. *June.* New spinning frames set up in No. 1 mill of Easthampton Spinning Co. *July.* Glendale Elastic Fabrics Co., Nashawannuck Suspender Manufacturing Co., and Williston & Knight Co. began running on half time.—Easthampton Rubber Thread Co. increased capital stock to \$300,000. *August.* Colton Elastic Fabric Mills, Williston Mills, and Easthampton Rubber Thread Co.'s mills ran on half time. *September.* Repairs made on broken engine in mill No. 2 of Easthampton Spinning Co.—Improvements made at factory of Easthampton Elastic Web Co. *December.* King Bros.' silk mill started on full time with reduced force.

**Easton.** In March, thread and twine mill of E. J. W. Morse & Co. destroyed by fire; business to be continued in Boston. *May.* Bursting of pulley caused damage in shoe factory of Rice & Hutchins. *October.* John B. King, shoes, went out of business; plant not sold. *December.* W. B. Drew & Co.'s heel factory destroyed by fire.

**Egremont.** In August, Dalzell's Axle Works shut down indefinitely.

**Enfield.** In June, Tebo & Handy erected stone tower at mill for fire purposes. *September.* Swift River Co.'s woollen mill ran but three days a week.

**Essex.** In March, machinery set up in new shoe stitching shop of Bartlett & McKenzie.—Cyrus Burnham, shipbuilder, died. *April.* Story, Perkins, & Co., shoes, dissolved; business continued by Story & Perkins.

**EVERETT.** In March, S. H. Kimball, toys and games, died; business discontinued. *April.* Varnish factory of H. H. Paul destroyed by fire.

**Fairhaven.** In January, several new tack machines placed in American Tack Co.'s branch of Atlas Tack Corporation. *May.* American Tack Co. shut down for stock taking.

**FALL RIVER.** In January, stockholders of Crescent Mills voted to reduce capital stock from \$500,000 to \$300,000, and then raise it again to \$400,000.—Stockholders of Granite Mills voted to increase capital stock from \$800,000 to \$1,000,000 and to increase number of shares.—New machinery put in Mechanics' Mills.—Directors of Hargraves Mills appropriated \$50,000 for building addition to mill No. 2 to contain 500 looms for weaving sateens.—Fall River Manufactory made improvements and additions.—Product of new Stevens Mill to be crocheted Marseilles quilts and bed coverings.—Stafford Mills resumed operations.—A. G. Thurston & Co. moved machine shop to old Davis Thread Mill.—Laurel Lake Mills started up in full.—Following shutdowns noted during month: Weetamoe Mills and American Linen Co. on account of accidents to engine and American Print Works to take account of stock.—Waste mill of Maurice T. Barlow damaged by fire. *February.* Benson & Austin discontinued business; plant, which was owned by Fall River Supply Co., sold to Davis & McLane, reeds and harnesses.—New mill of Sanford Spinning Co., work upon which began in May, 1892, put in operation.—New machinery set up in Seaconnet Mills.—New watchman's clock placed in Sanford Spinning Co.'s mill.—Crescent Mills became part of Merchants' Manufacturing Co.'s property.—Stockholders of Pocasset Manufacturing Co. voted to reduce capital stock to \$600,000.—New machinery added to King Philip Mills.—Picker room of Durfee Mill No. 2 damaged by fire. *March.* Directors of Weetamoe Mills decided to build brick addition, 100 x 100 feet, two stories, to contain 800 looms.—Improvements about American Print Works completed and operations resumed.—Improvements made in picker department of Wampanoag Mill No. 2.—New water wheel set up at Pocasset Mills.—Ground



broken for new Iron Works Mill; to be of brick, 142 x 306 feet, four stories. — Weavers of Border City Mill No. 2 received advance in wages. — Blowing out of cylinder head in engine at No. 1 Border City Mill caused brief shutdown. — New English machinery set up in Hargraves Mills. — Strike occurred among weavers in Hargraves Mills. — Fires for month: Picker room of Merchants' Mills and opening room of Laurel Lake Mills. *April.* Granite Mill No. 1 started up new 1,200 horse power engine. — Strikes for month: Marshall's Hat Works (framers) and Hargraves Mills (spinners). — Shed used by Chace Mills as cotton house destroyed by fire. *May.* Stockholders of Sanford Spinning Co. voted to increase capital stock by \$100,000. — Carding and spinning machinery at new Stevens Mill put in operation. — Kilburn, Lincoln, & Co. began erection of new machine shop. — Ground floor of Weetamoe Mills, formerly used as storehouse, changed into weave room. — Mechanics' Mills shut down on account of bursting of cylinder head. — Following mills added new machinery: Troy, Crescent, Stafford, and Seaconnet. — Picker room of Kerr Thread Mill damaged by fire. *June.* New machinery added to following mills: King Philip, Wampanoag, Merchants, Globe, Granite, Border City, and American Linen. — Improvements made about factory of Kerr Thread Co. — Accident to engine in Union Cotton Manufacturing Co.'s mill No. 1 caused shutdown of portion of plant. — Strikes for month: Richard Borden Manufacturing Co. (weavers) and Sanford Spinning Co. (back boys). — Cotton shed of Stevens Manufacturing Co. destroyed by fire. *July.* Troy Mills resumed operations in full. — Durfee Mills Co. began erection of new weave shed. — Barnard Manufacturing Co. and Sagamore Manufacturing Co. added new looms. — Wyoming Mills sold at auction to John W. Hargraves. — New machinery set up in Barnaby Mills. — Following shutdowns noted during month: Barnaby Mills, one week; Weetamoe Mills, four weeks; American Print Works, two weeks. — Eagle Stove Foundry reduced persons employed from 14 to 8. — Fires during month: Lumber yard of Cook, Borden, & Co.; picker room of Iron Works Mill No. 2; building occupied by Sumner's cigar factory and Wilkinson's candy factory. *August.* Fall River Bleachery resumed operations after shutdown of three days for repairs. — Repairs made in spinning department of Sagamore Mill No. 2. — Break in engine at Border City Mill No. 3 caused brief shutdown. — At meeting of treasurers of various mills it was voted to reduce wages from 10 to 15 per cent. — New Granite Mill No. 3 completed. — Break in machinery at Fall River Spool & Bobbin Works necessitated shutdown of three days. — Fall River Machine Co. ran three days per week. — Fall River Brewing Co. purchased old Hurst brewery to improve property. — Merchants' Manufacturing Co. shut down for the entire month; other shutdowns during month: American Linen Mills; Annawan Manufacturing Co.; Fall River Manufactory; Flint, Granite, King Philip, Laurel Lake, Metacomet, Robeson, Seaconnet, Shove, Stafford, Wampanoag, Mechanics, Cornell, and Conanicut Mills; Richard Borden Manufacturing Co.; Sanford Spinning Co.; Globe Yarn Mill No. 3; Eddy Manufacturing Co.; and Barnard Manufacturing Co. — Following mills resumed operations: Barnaby, Border City, Chace, Davol, Durfee, Globe No. 2, Hargraves, Narragansett, Osborn, Pocasset, Slade, Sagamore, Tecumseh, and Union. *September.* Kerr Thread Mills started on three days a week for an indefinite time. — Nathaniel Lewis, waste manufacturer, died. — Plant of Fall River Boot & Shoe Manufacturing Co. purchased by Quinn Bros. & Co. — With exception of Metacomet Mills, Fall River Manufactory, and American Linen Mills, all the factories resumed operations, many of them with reduced wages. — New machinery placed in Mechanics, Weetamoe, Union, Seaconnet, and King Philip Mills. — Fall River Iron Works Co. shut down. — Strikes for month: Merchants' Manufacturing Co. (speeder tenders) and Narragansett Mills (spinners). *October.* Operatives in King Philip Mills given their house rent free during time mills were idle. — Machinery set up in addition to Massasoit Manufacturing Co.'s mill. — Broken shaft in Crescent Mills caused shutdown for repairs. — Shove Mills shut down for two weeks to put in new engines and make improvements. — Break in engine at Union Mill No. 1 caused brief shutdown for repairs. — Stafford Mills, Sagamore Mills, Globe Yarn Mills, Conanicut Mills, and Sanford Spinning Co. resumed operations. — Shutdowns for month: Metacomet, Annawan, Fall River Manufactory, and Kerr Thread Co. — Bursting of steam pipe in Stafford Mill No. 1 caused shutdown. — Thomas Hacking, clothes lines, went out of business; no successor. — Strike occurred among ring spinners in Sagamore Mills. *November.* New machinery added to King Philip, Mechanics, Globe, Shove, Granite, and Laurel Lake Mills. — Kerr Thread Co. and Iron Works Mill Nos. 3 and 4 resumed operations. — Weetamoe Mills shut down for repairs. — Annawan Mills resumed operations after brief shutdown for repairs. — Repairs made to American Linen Co.'s mill wheel. — Fall River Spool & Bobbin Works shut down. — Break in machinery at Laurel Lake Mills caused brief shutdown for repairs. — Stockholders of Crescent Mills voted to wind up affairs and dissolve corporation. — Strike of weavers occurred in Chace Mills. — Eagle Stove Foundry reduced persons employed from 15 to 8 in November and December. *December.* Belmont Manufacturing Co., Barnaby Mills, and Globe Yarn Mills reduced force. — Chace Mill and Belmont Manufacturing Co. resumed operations in full. — New Granite

Mill began operations. — King Philip Mills shut down for Christmas week. — Part of machinery set up in new Granite Mill No. 8; mill to contain 22,000 spindles; 1,056 looms; 86 jacks of 200 spindles each; 12 roving frames of 172 spindles each; 6 intermediates of 132 spindles each; 10 lappers; 42 cards; 81 ring frames of 240 spindles each; and 8 spoolers. — Wyoming Thread Mill Co. organized; capital stock \$54,000. — New machinery added to Iron Works, Union, and Durfee Mills. — The annual cloth statement issued by Remington & Davol for 1893 showed a production of 9,065,000 pieces, a decrease, as compared with 1892, of 980,000 pieces, or 9.76 per cent. Sales for the year were 7,119,000 pieces, of which 4,245,000 pieces were "odds" and 2,874,000 pieces were 64 x 64s. This showed a decrease, as compared with 1892, of 3,640,000 pieces, or 33.83 per cent. There were 950,000 pieces sold for future delivery as against 2,850,000 in 1892, a decrease of 1,900,000 pieces, or 66.67 per cent. The average price paid during the year was .082950 cents, the highest 4 cents and the lowest 2½ cents. The following table shows production and sales since 1888 :

CLASSIFICATION.	NUMBER OF PIECES					
	1888	1889	1890	1891	1892	1893
Total production, . . .	8,865,000	8,640,000	9,937,000	9,965,000	10,045,000	9,065,000
Sales :						
Odd, . . . . .	3,580,000	4,151,000	3,876,000	4,423,000	5,547,000	4,245,000
60 x 56, . . . . .	200,000	147,000	184,000	125,000	173,000	-
64 x 64, . . . . .	4,918,000	3,950,000	4,524,000	4,290,000	5,089,000	2,874,000
Other sales, . . . . .	444,000	-	-	-	-	-
On hand at close of year, .	5,000	85,000	583,000	90,000	7,000	142,000
Sold for future delivery, .	1,780,000	1,348,000	1,540,000	1,375,000	2,850,000	950,000

**FITCHBURG.** In January, large storehouse added to Orwell Mills. — Company formed to build and operate print cloth establishment; capital stock \$250,000. Stockholders organized and the name "Nockage Mills" adopted. *February.* Hydraulic elevator placed in plant of Simonds Manufacturing Co. *March.* Beoli Mills added six new spinning frames. *April.* Fitchburg Manufacturing Co., recently purchased by C. T. & Adams Crocker, resumed operations. — C. A. Edgerton Manufacturing Co., of Shirley, decided to move to this city. — B. E. & G. S. Smiley of Worcester leased two buildings for manufacture of mattresses. *May.* Work begun on foundation of building for C. A. Edgerton Manufacturing Co., webs and suspenders, to be 225 x 46 feet, three stories high. — Strike occurred among E. M. Dickinson & Co.'s lasters. *June.* Simonds Rolling Machine Co. ran mill 22 hours per day to fill orders. — Manufacture of mattresses started by Smiley Bros. under firm name of South Fitchburg Manufacturing Co. — Addition, 40 x 100 feet, made to Falulah Paper Co.'s main mill. — Work begun on foundation of Nockage Mills; to be of brick, 75 x 322 feet, three stories. *July.* National Cycle Co. organized under State of Maine laws; capital stock \$500,000. — New machinery placed in Grant Yarn Mill. — Beoli Mills, run by Jas. Phillips, Jr., incorporated as Beoli Co., to manufacture woollen and other fabrics; capital stock \$300,000. — Putnam Machine Co.'s works closed indefinitely. — Beoli Co., Star Worsted Co., Fitchburg Worsted Co., and Fitchburg Manufacturing Co., ran four days a week. *August.* Fitchburg Duck Mills shut down for two weeks to make repairs. — Repairs made about Snow Mill. — Orwell Mills resumed operations. — Parkhill Manufacturing Co. ran mills three days a week. — Instant Freezer Co. established to manufacture freezing machinery; capital stock \$5,000. — Strike occurred among moulders in Putnam Machine Co. *September.* Directors of Star Worsted Co. decided to go out of business. — J. H. Foss Co. incorporated; capital stock \$10,000. — American Pruning Co. dissolved. — Parkhill Manufacturing Co. shut down for two weeks. — Beoli Mills, Fitchburg Duck Mills, and Grant Yarn Mill resumed operations. *October.* Fitchburg Worsted Co., Baltic Mills Co., and Parkhill Manufacturing Co. started up with reduction in wages. — B. M. Pitts' cotton mills resumed operations after shutdown of five weeks. — Putnam Machine Co. started up. — New idea in steam pumps carried out at machine shop of H. C. Deane; the valve of the pump is automatic, and operates by direct steam without the aid of a valve rod or tippet. Citizens of Warren formed company for its manufacture. —



Wanooanoc Power Co. organized for purpose of generating electricity at a power house and transmitting it to manufactories in the city. — W. A. Garno removed old mill, to be replaced by new building, 80 x 50 feet, three stories; to be used as saw and planing mill, also as box factory. *November.* Crocker, Burbank, & Co., paper, reduced wages. — Baltic Mills Co. increased force. — Grant Anti-Friction Ball Co. sold business to Cleveland Machine Screw Co.; business to be removed to Cleveland, Ohio. — Fitchburg Duck Mills ran on short time. — Jerome Mossman, wood novelties, and Beoli Mills started up on full time. — Patent device for manufacture of tape from leather-board, to be used in covering electric wires, started at leather-board mill. — Parkhill Manufacturing Co. started up in full. *December.* Foundation started for W. A. Garno's box factory and saw mill; to be of wood, 80 x 50 feet, three stories. — Mitchell Manufacturing Co., cottons, resumed operations. — Chas. T. Crocker purchased machinery of Star Worsted Mill; manufacture of worsted yarn continued. — Geo. Whitney Woollen Co. removed to Enfield, N. H.

**Foxborough.** In July, Virgil S. Pond, boxes, merged business into V. S. Pond Co. *November.* The E. B. Rogers boot and shoe factory, idle for two years, leased by a straw goods firm. — W. J. Lewis, machinery, resumed operations.

**Framingham.** In January, Singapore Rattan Works shut down in part for short time. — New sewers taken on at T. L. Barbor & Co.'s straw factory. — Framingham Box Co. connected by telephone with all shoe factories in town. *February.* Addition to Gregory & Shaw's shoe factory completed. *March.* Staples & Smalley, straw goods, worked nights. *April.* New machinery set up by Enterprise Manufacturing Co. *May.* Chas. Moulton's elder mill and carpenter shop destroyed by fire. *June.* Pope Manufacturing Co. of Boston secured buildings of Pará Rubber Works. *July.* Gregory, Shaw, & Co., shoes, reduced working force. — Elliott Hickory Cycle Co. of Newton, merged into Pope Manufacturing Co., to occupy renovated buildings of Pará Rubber Works. *August.* Reed chair factory of A. H. Ordway & Co. shut down for month. — Framingham Brass Co. leased additional quarters. *September.* Saxonville Woollen Mills closed for one week. *October.* H. M. Richardson, of Leominster, leased factory for five years for manufacture of baby carriages, etc. — New machinery added to Saxonville Mills for manufacture of blankets. — A. H. Ordway & Co., rattan chairs, reduced wages. — Gilchrist & Taylor increased force in foundry and machine shop. — Elliott Hickory Cycle Co. began manufacture of hickory bicycles in old Pará plant; fifty men employed. *November.* E. F. Delaney, shoe knives, moved plant to Boston. — Saxonville Woollen Mills shut down indefinitely. — Clark & Conant's portable saw mill destroyed by fire.

**Franklin.** In January, Geo. Singleton of Woonsocket, R. I., leased mill formerly occupied by Saxon Worsted Co., to manufacture woollen goods. — J. W. Clark & Sons ran machine shop night and day to keep up with orders. *February.* Ray Woollen Co. ran nights. *April.* Singleton Worsted Co. started up plant. — Franklin Rubber Works shut down for two weeks for stock taking. — Waite Felting Co. began erection of new storehouse 30 x 40 feet. *July.* Franklin Knitting Co. put in spinning plant and two knitting machines. — Through efforts of Milford Business Men's Association, Franklin Iron Foundry Co. induced to remove to Milford. *August.* Erikson & Stewart reopened straw goods factory. — Waite Felt Mill closed for short time. — Waterman Clothing Co. organized to manufacture clothing; capital stock \$10,000. — Franklin Rubber Works shut down for two weeks' vacation. — Norfolk Woollen Co. decreased number of persons employed from 31 in July to 6 in August, running with small force balance of year. — Storehouse of Franklin Knitting Mill destroyed by fire. *September.* Ray Woollen Co. resumed operations. — J. B. Hopkins & Co.'s canning factory started on fall work. — Lowell B. Cleveland, bonnet and hat blocks, died, aged 78 years. — Norfolk Woollen Co. started up after shutdown of several weeks. — Franklin Knitting Co. shut down for three months; worked on short time in December. — Henry T. Hayward shut down between September 1 and November 30.

**Freetown.** In January, boiler explosion occurred in Durfee's wood acid mill.

**Gardner.** In January, erection of new foundry for Warfield & Gilson begun. *February.* L. Sawin & Son started up their new woodworking establishment. — Art Publishing Co.'s building destroyed by fire. *April.* Central Oilgas Stove Co. ran part of plant evenings to keep orders filled. — Nichols Bros., formerly of Westminster, erected three-story wooden building for manufacture of cane and wood seat chairs. — Warfield & Gilson completed iron foundry; building 50 x 80 feet with extension 40 x 10 feet. *May.* Heywood Fire Co. organized for protection of Heywood Chair Factory. — Worcester Reed Chair Co. organized; captai

stock \$15,000. — A. Priest & Son bought A. F. Adams' piano shop and will use it as a manufactory for house builders' finish. *July*. New elevator placed in Heywood Chair Factory. — Work begun preparatory to erecting new brick dryhouse at Heywood Chair Factory. — F. O. Gilson retired from firm of Warfield & Gilson, iron founders; to be succeeded by C. H. Kenson. *August*. Electric Street Railway Co. organized; capital stock \$75,000. *September*. Chair shops of Heywood Bros. & Co. shut down for one week. — Shops of P. Derby & Co. and S. Bent & Bros. ran but five days per week. *November*. Excavating begun for addition to Heywood Bros. & Co.'s chair factory; to be of brick, three stories.

**Georgetown.** In May, L. C. Chase & Co., of Boston, took possession of Parker River Woollen Mill for manufacture of horse blankets and other coarse goods; mill started up with thirty men. *July*. F. H. Foss, a Haverhill shoe manufacturer, leased factory and removed to this town. *August*. Box factory resumed operations. *September*. W. M. Brewster started up shoe factory. *October*. Shoe factory of F. H. Foss lighted by electricity. *November*. Parker River Woollen Mills resumed operations. — Palmer & Tenney began manufacture of children's fine shoes.

**Gill.** Turner's Falls Lumber Co. shut down one week for repairs.

**GLOUCESTER.** In January, Daniel H. Wallace discontinued business; no successor. *March*. Tarr & Wonsen formed to manufacture paints, etc.; capital stock \$120,000. *May*. Cape Ann Granite Co.'s plant sold at auction to Rockport Granite Co. *June*. Union Glue Co. incorporated to manufacture glue, mucilage, and other adhesive substances; capital stock \$6,000. — Davis Bros. started manufacture of patented bits and hardware specialties. *August*. Cape Ann Drop Forge Works started up with 22 men. *October*. Firm of A. P. Stoddart & Son changed to A. P. Stoddart & Co., iron work and pattern making. *December*. G. W. Prouty Co. incorporated; capital stock \$25,000. — A. Marchant & Son, soaps, dissolved; continued by C. S. Marchant.

**Grafton.** In January, currying shop of L. W. Dodge & Son shut down. *February*. Essek Saunders, cotton, died, aged 93 years. *March*. Business at shoe factory of Gibbs & Allen suspended owing to illness of Mr. Allen. *April*. Herbert F. Allen of Gibbs & Allen, shoes, died, aged 52 years. *July*. Washington Mills Emery Manufacturing Co. began erection of new storehouse. — Finlayson, Bousfield, & Co., linen thread, decided to erect new mill; to be of brick, 150 feet long, two stories. *August*. Saunders Cotton Mill shut down for two weeks. *September*. Fisher Manufacturing Co. ran but 30 hours a week and reduced wages of operatives. — Flax mills of Finlayson, Bousfield, & Co. shut down temporarily and work begun on addition to bleachery building. — Saunders Cotton Mill started up on full time. — Waste house of Fisher Manufacturing Co. destroyed by fire. *October*. Fisher Manufacturing Co. started up on full time. *November*. S. A. Forbush, shoes, resumed operations. *December*. Washington Emery Mills shut down from September to December, inclusive.

**Great Barrington.** In January, stock, machinery, and buildings of Owen Paper Co. deeded to Andrew Mills of New York. *February*. New boiler put in Hackett's machine shop. *May*. Riverdale Cotton Co. incorporated to manufacture cotton goods; capital stock \$100,000. *June*. Twenty-five carding machines set up in Monument Mills. — Work begun on Riverdale Cotton Co.'s mill; to consist of two two-story structures, 50 x 200 feet, with boiler and engine house 49 x 60 feet. — Foundation of new weave shed begun for Monument Mills; to be of wood, 50 x 100 feet, two stories; fancy bed quilts to be manufactured. *July*. Everett Woollen Mills shut down for one month. *August*. Mill of Owen Paper Co. closed. — Grist mill property known as Seekonk Mill sold to Charles Vincent. *September*. Monument Mills resumed operations and Everett Woollen Mills started up in part.

**Greenfield.** In January, foundation laid for iron foundry to be occupied by Hinsdale (N. H.) Foundry Co.; to be of brick, 72 x 44 feet, one story, with asbestos roof. — Geo. C. Hall, shoes, succeeded by Geo. C. Hall Shoe Co. — Dudley's box shop damaged by fire. *March*. A. H. Wright & Son succeeded firm of Wright, Lyons, & Co. which was dissolved owing to death of Geo. E. Lyons. — Roof of T. N. Austin & Co.'s planing mill slightly damaged by fire. *May*. Accident to beeling machine in Geo. C. Hall Shoe Co.'s factory caused setback of some days. *July*. General reduction of wages made at shoe factory of Cutler, Lyons, & Field. — Goodell Bros. started up their factory. — B. B. Noyes & Co. started up factory, repairs on boiler being completed. — Geo. C. Hall Shoe Co. resumed operations after week's vacation for inventory. — Silver shops of A. F. Towle & Son Co. closed for repairs.

—T. N. Austin sold interest in lumber business to partner, W. B. Gaines, who organized local stock company under name of Franklin Lumber Co.; capital stock \$20,000. *August*. Offinger & Sauter, new firm, leased old pattern shop of Wiley & Russell Manufacturing Co. for one year, and began manufacture of patent harmonicas. —Chas. R. Field, baby carriages and wheels, resumed operations. *September*. Franklin Lumber Co. bought out window, door, and blind business of A. G. Miner. —W. H. Kilbourn's new manufactory completed. *October*. R. H. Eddy purchased certain rights of Vermont Manufacturing Co. —B. B. Noyes & Co. started shops on eight hours a day. *November*. Geo. C. Hall Shoe Co. changed to Franklin Shoe Co.

**Groton.** In February, high water caused shutdown of A. H. Thompson's mill for a few days. *September*. Groton Mill closed. —Tileston & Hollingsworth Co., paper, resumed operations. *October*. Squanacook Mill closed. —The paper mills started up on full time after shutdown of two weeks.

**Groveland.** In September, Groveland Woollen Mills shut down for two weeks.

**Hanover.** In February, E. Phillips & Sons ran night and day to keep up with orders. *November*. Goodrich, Cloutman, & Dunham, shoes, dissolved; succeeded by Goodrich & Young.

**Hanson.** In August, work begun on addition to Foster Mill.

**Hardwick.** In August, Geo. H. Gilbert Manufacturing Co., woollens, started on four days a week schedule; resumed operations on full time in October.

**HAVERHILL.** In January, plant of Rosemont Carriage Co. sold to D. S. Kimball of Manchester, N. H.; business removed to that place. —Jos. H. Carr & Co., shoes, dissolved; business continued by Alex. F. Cusson. —New machinery placed in Hayes' box mill. —Morrill & Co.'s shoe factory damaged by boiler explosion. —H. H. & F. S. Gage, shoes, increased facilities. —Foss & Hazeltine began manufacture of shoe heels. —A. J. Tilton who conducted a shoe factory at Ipswich House of Correction, removed business to this city. —Ellis & Connor, shoes, dissolved; business continued by J. H. Connor, who moved into new factory. —Fires for month: John Owen, wood and paper boxes; L. A. Finney, shoes; Byron Noyes, shoes; and O. S. Currier, paper boxes. *February*. Eben G. Tilton, shoes, died. —Harry W. Cloggston established to manufacture slippers; special capital \$25,000. —Accident to boiler at C. W. Hayes' box factory caused shutdown by 40 manufacturers who depended on it for power; 2,000 people thrown out of work temporarily. —Victor H. Beane, slippers, removed to new quarters. —J. H. May, formerly of Boston, opened a slipper factory. —M. C. Cram, shoes, purchased A. B. Brown & Co.'s stock and trade. —Strike occurred among cutters in H. B. Goodrich & Co.'s factory. —Building occupied by White & Sanborn damaged by fire. *March*. G. H. Hoyt, paper boxes, admitted son to partnership under firm name of G. H. Hoyt & Son. —Morse Bros. & Co., shoes, started up Bon Ton stitching room adjoining factory. —Strikes for month: Byron Noyes & Co., (machine operators) and Wallace, Elliott, & Co. (lasters and beaters out). —Block occupied by L. A. Finney, Byron Noyes & Co., E. P. Dodge & Co., shoes, and O. S. Currier, paper boxes, damaged by fire. *April*. E. N. Simpson, tongues, stays, lacings, etc., moved to West Newbury. —Firm of Sanborn & Davis dissolved; business continued by Wm. Davis. —Hale & Valentine, shoes, dissolved. —Daniel Hooke, shoes, died, aged 64 years. *May*. Shoe factory of J. H. Durgin undermined by freshet. —Lambert, Berry, & Co. began manufacture of leather shanks for shoes. —S. P. Gardner, shoes, shut down permanently. —Arthur Prescott, shoes, shut down for balance of year. *June*. Break in engine at Chick Bros.' factory repaired and operations resumed. —Day & Merrill, shoes, dissolved; business continued by Edw. B. Merrill. —Parkhurst & Brooks, gymnasium shoes, removed to new quarters. —A. E. Fernald, shoe tips, bought out H. M. Vine, shoes and slippers. —Engine at Jaques' power station, which furnished power for 125 manufacturers, broke down; 2,000 people temporarily thrown out of employment. —Strike occurred among employes of Geo. W. Gilbert, cut soles, etc. —Fires for month: E. A. Messenger, house finish; drying room of L. C. Wadleigh & Son's last factory, and W. Edelstein & Co.'s shoe factory. *July*. Griffin & George, shoes, dissolved; business continued by H. B. George. —Alex. F. Cusson, shoes, sold out to W. W. Ham & Co. —Byron Noyes & Co., shoes, dissolved; Edw. W. Noyes retired and Byron Noyes continued under same style. —Geo. A. Green of Green & Nichols, sole cutters, died, aged 63 years. —W. B. Thom & Co., hats, closed mills for week. —Part of the lasting machines in factory of T. S. Ruddock & Son started up. —Griffin Bros. & Co. and Sumner Bros., shoes, resumed opera-

tions after shutdown. — Soda and mineral water manufacturing establishment of O. A. Smith damaged by fire. *August*. Shoe factory of W. S. Chase & Sons started up on four days a week. — G. H. Hoyt & Son's box factory shut down. — Miller & Foster, shoes, started up after two weeks' shutdown. — Chick Bros., shoes, made improvements. — Appleton & Bassett, shoes, dissolved; succeeded by S. C. Bassett & Co. — W. B. Thom & Co., hats, resumed operations on half time. — Weeks, Cummings, & Co., marble and granite, succeeded by Frank G. Cummings. — Stevens Woollen Mills shut down indefinitely. — John W. Russ reduced wages of employes. — Frank Kiezer, slippers, purchased factory formerly operated by Walter Hale. — A. J. Tewksbury, shoes, sold out to L. M. Hall. — Strike occurred among machine lasters in factory of Searl & Webster. — J. A. Lynch's shoe factory damaged by fire. — Henry Christenson, heels, etc., discontinued business; no successor. *September*. W. B. Thom & Co., hats, started up on full time. — Byron Noyes, shoes, removed to new factory. — New roof built and other improvements made at dyehouse of Stevens Woollen Mill. — Stevens Woollen Mill, C. E. Greenman, and Ellis & Nason resumed operations. *October*. Manufacture of brush and burnish stains for boots and shoes established. — Holt & Mayberry, heels, dissolved. — Eugene Connor, formerly of Feeley & Connor, began manufacture of custom shoes. *November*. Chick Bros., shoes, started up in part after shutdown of several weeks. — O. S. Currier made improvements and increased capacity of box factory. — C. P. Emery & Co. began manufacture of shoes. — Wm. Bray added new engine and dynamo to shoe factory. — M. C. Cram added three new lasting machines to shoe factory. — W. C. Lewis Co., shoes, incorporated; capital stock \$20,000. *December*. G. H. Leighton began manufacture of slippers. — John Pilling's shoe factory damaged by bursting of water pipe. — M. T. Stevens & Sons, woollens, reduced working time.

**Hingham.** In January, Shawmut Manufacturing Co., leatherette, added new machinery.

**Hinsdale.** In July, Hinsdale Bros., woollens, shut down two of their three mills; third mill to run five days per week. *August*. Repairs and improvements made at Halle & Frost's mills and Brightwood Paper Mills. *November*. Hinsdale Mills shut down temporarily on account of accident to cylinder.

**Holbrook.** In February, establishment of A. F. McCabe, tinsmith, damaged by fire. *April*. Edmund White, shoes, notified employes that he would shut down factory by May 1 and retire from business. *August*. Whitcomb & Paine started up their shoe factory.

**Holden.** In April, M. V. B. Jefferson, proprietor of Jefferson Mills, purchased property known as Holden Mills. — William H. Coe started up woollen mill formerly operated by A. H. Turner & Co. *May*. Jefferson Manufacturing Co. put set of cards in mill bought of Holden Co. to manufacture satinets. *December*. Woollen mill of Wm. H. Coe shut down during November and December.

**Holliston.** In January, C. F. Driscoll purchased Draper boot factory. *March*. Eaton, Stetson, & Co., shoes, removed from Whitman to this town. *August*. Holliston Woollen Mills shut down for thirty days. *October*. Work begun on new harness factory for John Hughes and M. F. Coughlin; building to be 130 x 45 feet, two stories. — Personal property and stock of Holliston Woollen Mills sold to Fred Barbour of Boston. *November*. Holliston Woollen Mills started up to run out stock on hand. *December*. Bent Bros. & Co., of Wayland, and Holliston Shoe Co. applied for permission to consolidate.

**HOLYOKE.** In January, Holyoke Braid Co. completed arrangements for starting braid mill. — B. F. Perkins & Son bought of K. & J. Shannon half interest in paper mill at South Hadley Falls. — Erection of paper mill for Riverside Paper Co. begun; to be of brick, 565 x 65 feet, four stories. — Picker room of Connor Bros.' woollen mill slightly damaged by fire. — Holyoke Hydrant & Iron Works increased capital stock \$20,000. *February*. John E. Brown Manufacturing Co. organized to manufacture shoddy; capital stock \$15,000. — New England Carriage Wheel Factory sold at auction. — Kennedy & Sullivan Manufacturing Co. formed to engage in lighting, heating, and water machinery business; capital stock \$25,000. — Hadley Thread Co. put in 1,000 horse power boiler and 800 horse power engine. — Preston Manufacturing Co. established to manufacture shirts, collars, underwear, etc.; capital stock \$5,000. — Engines set up at new Linden Paper Mill. — Goetz Silk Manufacturing Co. incorporated; capital stock \$30,000. — Capital stock of Brown Manufacturing Co., bed quilts, increased to \$15,000. *April*. Holyoke Envelope Co. added new 75 horse power engine. — Work begun at Linden Paper Mill. — Valley Paper Co. put in new perfecting engines and four new filters. — Crocker Manufacturing Co. set up new 200 horse power boiler. — Albion Paper Co. put in new 1,000 pound beating engine. — E. F. White sold his box manufacturing

business. — Contract awarded for addition to Wm. Skinner & Sons' silk mills; to be 102 x 40 feet, five stories. — Riverside Paper Co. began erection of three story brick building, 332 x 180 feet, to be known as Riverside No. 2 Mill. — Merrick Thread Co. began erection of new brick mill, 161 x 100 feet, three stories. — New 250 horse power engine placed in Norman Paper Mill to run heating and washing machinery. — Beebe & Holbrook Paper Co. began erection of new building. — Union Paper Mill damaged by fire. *May.* Following mills obliged to shut down wholly or in part by high water: Chemical Paper Co., Excelsior Paper Co., Newton Paper Co., Hampden Glazed Paper & Card Co., Hadley Thread Co., Norman Paper Co., Riverside Paper Co., G. E. Gill Co., Nonotuck Paper Co., Albion Paper Co., Crocker Manufacturing Co. — New water wheels placed in Lyman Mills. — Chemical Paper Mill damaged by fire. *June.* New 200 horse power engine set up in Nonotuck Paper Mill. — Chemical Paper Co. began erection of wooden storehouse 200 feet long. — Mills depending wholly upon water power inconvenienced by caving in of sewer main. — Work begun on foundation of addition to Hampden Glazed Paper & Card Co.'s mill. — Connecticut River Paper Co.'s building damaged by fire. *July.* Following shutdowns noted during month: Springfield Blanket Co., Connecticut River Paper Co., Taylor Manufacturing Co., Germania Woollen Mills (in part), Farr Alpaca Mill No. 1 (for repairs on broken penstock), and Linden Paper Co., Parsons Paper Mill, and Prentiss Wire Mill on account of low water. — Keating Wheel Co. discharged all but a few employes. — New floor laid in engine room at Beebe & Holbrook's paper mill. — Deane Steam Pump Works started up after two weeks' shutdown. *August.* Germania Mills reduced working time to five days per week, eight hours per day. — Wauregan Paper Co. resumed operations after brief shutdown for repairs. — Repairs made on engine at Whiting Paper Mill No. 1. — Riverside Paper Mill resumed operations after two weeks' shutdown. — Following shutdowns noted during month: Parsons Paper Mill No. 1, Hadley Thread Co., Chemical Paper Mill, Holyoke Envelope Co. — Henry Seymour Cutlery Co.'s building damaged by fire. *September.* Following mills resumed operations: Hadley Thread, Lyman, Riverside, Linden, Holyoke, and Connecticut River Paper; Hadley Thread Co. and Lyman Mills with reduction in wages. *October.* Farr Alpaca Co. started up on short time and with reduction in wages, after shutdown of two weeks. — About \$20,000 worth of new machinery placed in No. 2 Whiting Mill. *November.* Germania Mills shut down for repairs and improvements. — Riverside Paper Co. added refining engine. — Springfield Blanket Co. started up on gray and white goods. — Deane Steam Pump Co. increased capital stock \$100,000. — Norman Paper Co. increased capital stock \$100,000. *December.* Merrick Thread Mills shut down temporarily. — Hadley Thread Co. made improvements and repairs and added new machinery. — From August to December, inclusive, about two-thirds of employes of G. R. Dickinson Paper Co. were employed on full time. — Holyoke Water Power Co. increased capital stock \$600,000.

**Hopedale.** In March, two new goring looms put in at Hopedale Elastic Fabric Mill. *May.* New engine put in by Dutcher Temple Co. to furnish power for dynamo. — Hopedale Electric Co. added planing mill to machine shop plant. *June.* Foundation of addition for Hopedale Electric Co. started; to be of wood, 100 x 120 feet, one story. *July.* Hopedale Elastic Fabric Co. added four looms. — Hopedale Machine Screw Co. increased capital stock \$50,000. *November.* Hopedale Elastic Fabric Co. ran on short time.

**Hopkinton.** In January, five new lasting machines placed in shoe factory of Crooks, Root, & Co. *February.* Samuel Crooks of Crooks, Root, & Co., shoes, died; business continued by remaining partners.

**Hubbardston.** In April, Eagle Woollen Mills destroyed by fire; to be rebuilt. *August.* W. H. Bowdlear purchased mill property at Williamsville to manufacture beeswax.

**Hudson.** In January, Augustus P. Martin & Co., shoes, removed to Boston. *February.* Apsley Rubber Co. started up new electric light plant in its works. — Work begun in stitching room of C. M. Brett's shoe factory. *March.* Box shop of N. G. Tripp destroyed by fire. *April.* Room for storing shavings added to Sawyer's box factory. — Harry Seaver withdrew from firm of H. H. Mawhinney & Co., shoes. *July.* P. E. Millay & Son, lasts, formed stock company under name of Millay Last Co., capital stock \$14,000, and moved into new quarters. *August.* Apsley Rubber Co. reduced working force temporarily. — Foundation laid for addition to shoe factory of L. T. Jefts; to be of wood, 10 x 80 feet, four stories. *October.* New boiler set up in Robertson & Larkin shoe factory. — F. Brigham & Co. made improvements about factory.



**Huntington.** In July, improvements made about water pit at Chester Paper Co.'s mill. *August.* Chester Paper Co.'s mill shut down for one week. *November.* Highland Mills shut down for two months.

**Hyde Park.** In January, Morris & Ireland Safe Co. purchased land for establishment of new works. — Mule room of B. B. & R. Knight's cotton mill damaged by fire. — Strike occurred among mackintosh makers in Boston Gossamer Rubber Co. *March.* Foundation for new Morris & Ireland Safe Works begun. — John Scott, proprietor of Wilton Wool Scouring Mill, died. — Readville Rubber Co. dissolved by Supreme Judicial Court. *May.* Morris & Ireland Safe Co. completed plant, consisting of seven one-story brick buildings. — B. B. & R. Knight, cotton goods, made enlargements and repairs. — Hyde Park Co. incorporated; capital stock \$15,000. *June.* American Tool & Machine Co. adopted nine-hour schedule. — Hood & Reynold's dental manufactory and Leslie's planing mill damaged by fire. — Strike occurred among employes of Clifton Manufacturing Co., clothing. *August.* Bleakie's woollen mill resumed operations in all departments. *November.* Bleakie's woollen mill ran on short time.

**Ipswich.** In February, Thompson & Claxton Heeling Manufacturing Co. sold out to S. A. Boynton. *May.* James Graffum resumed carriage building and repairing business. *June.* Fund raised by Board of Trade for establishment of shoe factory. — New York Shoe Manufacturing Co., of Lynn, began erection of factory; to be of wood, 50 x 150 feet, two stories. *July.* John A. Johnson shut down shoe factory for one week for repairs. — Ipswich Building Association formed to erect manufactories; capital stock \$7,000. — Plans drawn for addition to Ipswich Woollen Mills; to be of brick, 45 x 100 feet, one story. *August.* Automatic fire sprinklers placed in every room in Ipswich Woollen Mills. *October.* Addition built to office of Ipswich Woollen Mills.

**Kingston.** In March, machinery in Old Colony Rivet Factory removed and shipped to Taunton. *April.* Six new tack machines placed in H. C. & W. S. Cole's factory.

**LAWRENCE.** In January, Wimple Bar Shoe Co., formerly of South Boston, removed to this city. — New firm under name of Lawrence Knitting Co. leased building and machinery formerly run by J. H. Melledge & Co., and began manufacture of hosiery. *February.* Archibald Wheel Co. increased capital stock \$30,000. *March.* Operations begun at Robert Carruthers' reed and loom harness factory. — Washington Mills Co. leased woollen mill property at South Coventry, Ct. — Emmons Loom Harness Works and Essex Paper Box Co. damaged by fire. *April.* Fires for month: furniture factory of Wm. H. Godfrey and sausage factory of E. B. Galloway & Son. *May.* The L. Sprague Co. purchased property of Lawrence Lumber Co. — Work begun on erection of new brass finishing factory for J. E. Watts; to be of brick, 53 x 30 feet, three stories. — Board of Trade raised \$30,000 for new shoe factory for Kimball Bros., formerly of Kennebunk, Me.; to be of wood, 250 x 50 feet, four stories; foundation started in July. — W. R. Hamilton & Son ran nights. — Strike of weavers occurred in Arlington Mills. *June.* Work of excavating begun for addition to E. F. Lewis' wool scouring house; to be of wood, 50 x 83 feet, three stories. — New looms placed in upper Pacific Mills. — New factory of Briggs & Allyn Manufacturing Co. dedicated and occupied. — Everett Mills increased capital stock \$303,600 and decreased it \$3,600. — Globe Worsted Mills increased capital stock \$60,000. — Strike occurred among spinners in Everett Mills. *July.* Wages of wool sorters in Arlington Mills reduced. — Phillips & Kunhardt, Brown & Ackroyd, and Arlington Mills ran overtime. — Bacon Paper Co. shut down for repairs and improvements. — Old storehouse belonging to Munroe Paper Co. destroyed by fire. *August.* Following shut-downs occurred owing to dull trade: Arlington Mills, Everett Mills, Atlantic Cotton Mills, Washington Mills, Munroe Paper Mills, Pemberton Cotton Mills, Pacific Mills, and Stedman & Smith. — L. Sjöström & Son's dye works resumed operations after brief shutdown for repairs. — Repairs made about Munroe Paper Mills and Everett Mills. — Four new boilers set up in Pemberton Mills. — Bacon Paper Co. resumed operations with reduced force. *September.* Globe Worsted Co. started up. — Three new wool scouring machines set up in E. F. Lewis' plant. — Lawrence Improvement Co. incorporated; capital stock \$45,000. — Pemberton Co. reduced help from 698 to 81 persons. — Following mills resumed operations with reduction in wages: Pacific, Atlantic, Arlington, Phillips & Kunhardt, and Washington. — Strike occurred among loom fixers in Washington Mills. — Everett Mills shut down during entire month. *October.* J. H. Horne & Sons Co., paper mill machinery, reduced wages. — Everett and Pemberton Mills started up in full. — Work begun by Kimball Bros. in new shoe factory. — Arlington Cotton Mills suspended operations indefinitely. — Lower Pacific Mills

started up all departments on short time and with reduction in wages. — Everett Mills ran seven hours a day, five days a week. — Phillips & Kunhardt closed all departments except finishing, owing to lack of orders. — Lawrence Line Co. increased capital stock \$10,000. *November.* All tenants of Pemberton Mills corporation houses notified that no rent would be charged for time that mills were shut down. — Lower Pacific Mills ran full time. — Phillips & Kunhardt started up on short time. — Merrimac Paper Co. began operations in new mill. — Russell Paper Co. started up. — Washington Mills shut down in part. — Arlington Mills ran overtime but with reduced force. — Dyeing department in lower Pacific Mills shut down for repairs. — Following mills started up in full: Atlantic, upper and lower Pacific, Lewis Wool Scouring, and Farwell Bleachery. *December.* Arlington Mills added new system of warping and spooling yarns. — Wameest Shoddy Mills shut down owing to break in engine. — Foundation of dyehouse for Washington Mills completed; building to be of brick, 50 x 100 feet, one story. — Arlington Mills shut down in part for ten days. — Strike occurred among weavers in Washington Mills.

*Lee.* In January, plater and polisher set up in Tanner & Faxon paper mill; later in month mill destroyed by fire. — A. W. Eaton Paper Co. incorporated; capital stock \$25,000. *February.* E. & S. May Paper Co.'s mill shut down two weeks for repairs. — New machinery and separate room for rag cutter added to Eagle Mill. — Eaton, Dikeman, & Co. added new dynamo. *April.* D. M. Collins & Co., of Pittsfield, bought paper box plant of Hurlbut Paper Co. and added it to their plant at new knitting mill. — Stockhouse of Hurlbut Paper Co. destroyed by fire; to be rebuilt. — A. W. Eaton Paper Co. reduced capital stock \$13,000. *June.* Seventeen employes in Columbia Paper Mill suspended for two months owing to lack of orders. — Clark & Spencer Machine Co. adopted Saturday half-holiday system. — Thistle Wire Co.'s mill damaged by fire. *July.* A. W. Eaton Paper Co. bought Moreley Paper Mill which had been leased six months previously with that privilege. *August.* Smith Paper Co. reduced wages. — Three paper mills shut down temporarily. *September.* Eagle Mill started up on full time. — A. W. Eaton Paper Co. sold out and consolidated with E. & S. May Paper Co. as the Eaton, May, & Robbins Paper Co. *October.* New boiler set up in Thistle Wire Mill. — E. A. Houston placed new shingle machine in his mill. — Clark & Spencer built small addition to foundry plant. — Eight new carding machines placed in Bostwick Shoddy Mill. *November.* Mills of Eaton, May, & Robbins Paper Co. shut down for one week. *December.* Geo. K. Baird & Bros. ran paper mill four days per week. — Eaton, May, & Robbins Paper Co. shut down Moreley Mill. — Benton Bros., paper, started up on half time. — Hurlbut Paper Co.'s mill shut down temporarily.

*Leicester.* In January, factory of L. S. Watson Manufacturing Co. ran overtime. *February.* Twenty new card machines placed in J. & J. Murdock's card clothing factory. *March.* Main shaft at J. & J. Murdock's card clothing factory broke. *June.* L. B. Butler, woollens, began erection of one story brick addition to picker house. *July.* C. W. Warren & Son completed enlargement of factory. *August.* Following shutdowns noted: G. W. Olney, woollens, to put in new water wheel, and Lakeside Manufacturing Co. and A. W. Darling, satinet, dull trade. *September.* Part of employes at J. & J. Murdock's card clothing factory dismissed owing to lack of work. — E. G. Carlton & Sons resumed operations after brief shutdown for repairs. — A. W. Darling's satinet mills started up with reduction in wages. *October.* L. S. Watson Manufacturing Co., J. & J. Murdock, C. W. Warren & Son, and Rochdale Mills ran on short time. — E. D. Thayer's woollen mill started up on full time with reduction in wages. — A. E. Smith and Eli Collier reduced wages of employes. — Valley Woollen Mill resumed operations. — Geo. W. Olney reduced persons employed from 75 to 4 during September and October. *November.* New machinery added to A. W. Darling's satinet mills. — G. W. Olney's woollen mill started up with reduction in wages. — E. D. Thayer's woollen mill ran on short time. *December.* G. W. Olney, woollens, added new water wheel during shutdown. — John D. Clark, woollens, died, aged 55 years. — A. Howarth & Son, woollens, started up after shutdown of three days. — Following firms ran on reduced time: C. W. Warren & Son, Central Card Clothing Co., J. & J. Murdock, and L. S. Watson Manufacturing Co. — Electric light plant damaged by fire.

*Leominster.* In January, Pierce Construction Co. organized to construct electric railroads and manufacture railway supplies; capital stock \$9,000. — Bay State Shirt Co. went out of business; no successor. *February.* W. H. Jewett & Co., pianos, occupied new factory. — Leominster Manufacturing Co. formed to manufacture horn goods; capital stock \$50,000. *April.* Wachusett Shirt Co. increased facilities by additional stitching room and thirty-five new machines. — Jewett Piano Co. incorporated; capital stock \$20,000. *May.* F. W. Osgood and E. A. Newton succeeded C. A. Whitcomb, horn goods. — A. A. Tiedale and

B. A. Heath, reed goods, formed co-partnership. — F. A. Whitney Carriage Co. began erection of new factory; to be 40 x 120 feet, two stories and basement. — B. F. Blodgett & Co. began erection of new office building. *June.* Repairs and improvements made at Union Desk Co.'s plant. — Work begun on erection of new chimney and boiler house at Tiedale Factory. *July.* Geo. W. Wheelwright Paper Co. and Union Desk Co. resumed operations. — Crawford Stewart, stone work, died. — C. J. Cobleigh Piano Case Co. changed its name to Richardson Piano Case Co. — Factory of Damon & Howe, horn workers, damaged by fire. *August.* F. A. Whitney Carriage Co.'s factory and Sun Enamel Works resumed operations. — Tilton & Cook, horn workers, purchased old Richardson carriage factory. — Improvements made about Merriam, Hall, & Co.'s factory. *September.* H. M. Richardson leased plant of Wheeler & Hewes Harness Co. at South Framingham for five years, for manufacture of baby carriages, toys, etc. — Wachusett Shirt Co. and F. G. Smith Piano Case Co. resumed operations. — Repairs made about A. W. Colburn & Co.'s factory. — Operations resumed at Tenney & Porter's comb factory. — Whitney-Reed Chair Co. incorporated to manufacture fancy chairs, baby carriage bodies, and gears; capital stock \$50,000. *October.* Union Desk Co. resumed operations. — Richardson Piano Case Co. ran on nine-hour time. *November.* Wachusett Shirt Co. increased working time. — Leominster Worsted Co. increased working time and reduced wages. — Union Desk Co. began erection of new factory. — Mather & Winn Co. incorporated; capital stock \$15,000. *December.* Wachusett Shirt Co. ran five days per week. — W. S. Reed Toy Co. enlarged plant and added new engine. — J. A. Stowell acquired control of manufacture of Grosvenor shapers, formerly made by J. P. Grosvenor of Lowell.

**Lexington.** In March, Lexington Print Works increased capital stock \$12,000.

**Lincoln.** In November, additions to pulp mill completed.

**Littleton.** In January, addition to suspender factory completed. *December.* Geo. W. Richardson's lumber mill and storehouse destroyed by fire.

**Longmeadow.** In September, W. W. Coomes, spectacle and thimble manufacturer, died.

**LOWELL.** In January, new Pilling shoe factory completed. — Plant formerly belonging to Coburn Shuttle Co. started up by Parker & Sons, bobbin manufacturers. — New mill built for light manufacturing; brick, 60 x 60 feet, three stories. *February.* Haworth & Watson bought land for extension of copper tube works. — Abram H. Sherman scrap leather, removed business to Nashua, N. H. — John Pilling Shoe Co. incorporated, capital stock \$10,000; new factory dedicated. — Elevators placed in Appleton Mill. — Tremont & Suffolk Mills made change in character of product. — Robert Carruthers of Lawrence opened shop for manufacture of loom harness and reeds. — Work resumed upon new mill of Lowell Manufacturing Co., to be 130 x 50 feet, five stories; to contain carding and worsted spinning departments. — Lowell Iron Co. organized; capital stock \$15,000. — Fires for month: James Gunn Spool & Bobbin Co. and G. L. Cady, machinists' tools and supplies. *March.* Shaw Stocking Co. moved into new mill. — Whittier Cotton Mills ran nights. — Thorndike Manufacturing Co. began on Saturday half-holiday time. *April.* D. C. Brown Manufacturing Co. sold wire heddle business to L. S. Watson Manufacturing Co. of Leicester, twine harness business to American Twine Harness Association, and loom reed business to Robert Carruthers. — New speeders put in carding department of Boott Cotton Mills. — Lowell Wind Mill Co. and Spofford Manufacturing Co. of Peterborough, N. H., consolidated under name of Lowell-Spofford Manufacturing Co.; capital stock \$100,000. — Addition to laboratory of C. I. Hood & Co. begun; to be 168 x 35 feet, four stories. *May.* Operations begun in carding and worsted spinning departments of Lowell Manufacturing Co.'s new mill. — Standard Worsted Co. ran part of mill nights. — Drying room of Coburn Shuttle Co. damaged by fire. — Strikes for month: Middlesex Co. (web finishers), Thorndike Mills (weavers), and employes in Pilling's shoe factory. *June.* Suit of Tremont & Suffolk Mills against City of Lowell for abatement of taxes decided in favor of Mills. — Work begun on new three story machine shop; to have a frontage of 250 feet, with ell at each end of 120 feet. — Merrimack Manufacturing Co., United States Cartridge Co., and United States Bunting Co. shut down for four days. — Co-partnership under name of United States Bunting Co. dissolved and new one formed. *July.* Foundation started for addition to Massachusetts Cotton Mills; to be of brick, 60 x 150 feet, three stories. — Weavers discharged from Merrimack Mills owing to lack of roving. — New time schedule went into effect at Middlesex Mills. — A. L. Wright reduced number of employes in machine shop owing to lack of orders. — Work of excavating begun for Geo. W. Fifield's machine shop; to be of brick, 60 x 370 feet, three stories. — Bradbury-Stone Storage Battery Co., with number of auxiliary companies at Sioux Falls and Kansas City, merged into



one corporation to be known as Bradbury & Stone Electric Storage Co. — Criterion Knitting Co., Massachusetts Cotton Mills, and Merrimack Print Works added new machinery. — Repairs made on boiler house at Hamilton Mills. — Lowell Waste Co. organized; capital stock \$40,000. — Lowell Bleachery ran but four days a week. — Shutdowns for month: United States Cartridge Co., John M. Pevey's cotton mill, F. S. Perkins' machine shop, and Pilling shoe factory owing to dull trade; Lamson Cash Carrier Co. for annual vacation. *August.* Lamson Cash Carrier Co. resumed operations in full. — Massachusetts Mohair Plush Co. reduced force. — Wamesit Power Co. started up plant on short time. — Merrimack Clothing Co. organized to manufacture clothing; capital stock \$25,000. — Lawrence Manufacturing Co. added new machinery. — Novelty Knitting Machine Co. removed from Chelmsford to this city. — Shutdowns for month: Otis Allen & Sons' box shop, Lowell Bleachery, Merrimack Manufacturing Co., Appleton Manufacturing Co., Belvidere Woollen Manufacturing Co., Pickering Knitting Co., Hamilton Print Works, L. W. Faulkner & Sons, Tremont & Suffolk Mills, Middlesex Mills, J. M. Stover (shoes), Lowell Manufacturing Co., and John Pilling Shoe Co. (for two months). — United States Bunting Co. ran mills but four days a week. — Standard Worsted Co.'s mill damaged by fire. *September.* Sterling Mills resumed operations after three weeks' vacation. — Hamilton Manufacturing Co. put in new 250 horse power engine. — Boott Cotton Mills put in new fly-frames. — Break in main belt at United States Cartridge Co.'s plant caused brief shutdown for repairs. — Repairs and improvements made about lower plant of Appleton Mills. — American Wire Goods Co. reduced persons employed from 24 to 2 during August and September. — All the mills resumed operations except Appleton and Tremont & Suffolk, most of them with reduction in time or wages. — Park Worsted Mills shut down entire month. *October.* Tremont & Suffolk Mills started up. — Kitson Machine Co. reduced force. — Merrimack Manufacturing Co. shut down on account of accident to engine. — Appleton Mills, Pickering Knitting Co., and Lawrence Manufacturing Co. started up. — Lowell Manufacturing Co., Sterling Woollen Mills, and Shaw Stocking Co. ran on short time. — Strike occurred among slubbers in Tremont & Suffolk Mills. *November.* Belvidere Woollen Mill No. 2 reduced running time to 40 hours per week. — Criterion Knitting Co. started up on full time after two months' shutdown. — Hamilton Co. began enlargement of print works. — Faulkner Mills resumed operations on full time. — Lowell Manufacturing Co., after shutdown for stock taking, resumed operations. — Wamesit Mills shut down temporarily owing to accident to engine. — Merrimack Print Works shut down for stock taking. — United States Bunting Co. and Lowell Machine Shop ran on short time. — American Bolt Co. started up after shutdown of two weeks. — J. S. Jacques & Co., shuttles, ran with reduced force. — United States Cartridge Co. resumed operations on full time. — Lowell Manufacturing Co., carpets, shut down; started again in December. — Massachusetts Mohair Plush Co. shut down eight weeks and Howard Stocking Co. six weeks, owing to dull trade. — Stott Bros. ran on two-thirds time. *December.* Belvidere Woollen Mills and Sterling Mills ran on two-thirds time. — Hamilton Manufacturing Co. shut down two weeks for stock taking and repairs. — Lowell Hosiery Co. ran on full time. — Shaw Stocking Co. reduced wages. — Lawrence Manufacturing Co. increased force of cotton weavers. — United States Bunting Co. ran three days per week. — Lawrence Manufacturing Co. shut down one mill for repairs. — Dryhouse of W. H. Parker & Son, spools and bobbins, destroyed by fire. — Howard Stocking Co. shut down for entire month.

**Ludlow.** In February, Ludlow Cordage Co. incorporated; capital stock \$100,000.

**Lunenburg.** In January, new boiler set up in Augustus Taylor's saw mill.

**LYNN.** In January, James W. Ingalls & Son, shoes, succeeded by Chas. H. Ingalls & Co. — J. R. Sherry & Co. established to manufacture shoes. — Chas. E. Harwood Co., soles, etc., incorporated; capital stock \$75,000. — Seymour & Morse, shoes, succeeded by Seymour & Jackson. — Moulton Leather Co. incorporated; capital stock \$50,000. — G. C. Davis, formerly of Beverly, started business in West Lynn. — Strike occurred among lasters in Leary & Luddy's factory. — Fires for month: Placide Hebert, shoes; A. A. Pitman & Co., shoes; Fred Lamphier, shoe tongues. *February.* Dickinson, Fisher, & Lane, slippers, succeeded by Fisher & Lane. — C. M. Howard established to manufacture shoes. — Lynn Counter Co. organized. — Wm. H. Clark & Co., heels, taps, etc., dissolved. — Timson & Horgan, shoes, removed to new quarters. — Atkins, Hoyt, & Co., cut soles, organized. — R. Y. Russell Printing & Paper Box Co. incorporated; capital stock \$12,000. — General Electric Co. resumed operations after shutdown for stock taking. — Dickinson Shoe Co., slippers, organized. — Travis Bros.' Shoe Co. incorporated; capital stock \$7,000. — Baker & Lord, shoes, removed to new quarters. — Stock company formed under name of C. E. Smith Shoe Co.; capital \$100,000. — Amos F. Breed, shoes, succeeded by C. A. Rogers & Co. — New machine shop started by

Tirrell, Ellis, & Co. — Strikes for month: Harney Bros (trimmers) and A. F. Smith (lasters). *March.* D. J. Richard and W. B. Littlefield formed limited partnership; capital \$10,000. — C. C. Logan & Co., shoes, dissolved. — B. G. Patten Co. closed business; no successor. — Part of factory A at Thomson-Houston plant ran nights. — John Harmon, shoes, died, aged 90 years. — Shillaber & Co., shoes, leased new factory. — Welch & Landregan equipped factory with lasting machines. — New steel foundry of General Electric Co. started up. — E. B. Newhall & Co., shoes, sold out to Milford Shoe Co. — Valpey & Anthony block destroyed by fire; among the losers were Lynn Cycle Co.; T. W. Tyler & Co., leather supplies. John Macfarlane & Son, printers; Maurice Flynn, shoes; and Brophey Bros. Shoe Co. — Strikes for month: Leary & Luddy (cutters), General Electric Co. (chippers), V. K. & A. H. Jones (hand-turned workmen), and A. B. Martin & Co. (finishers and putters out). *April.* Foundation laid for addition to morocco factory of A. B. Martin & Co.; brick, 45 x 115 feet, two stories. — G. T. Monies & Co. established to manufacture heels. — E. L. Burwell, shoes, succeeded by Burwell Shoe Co. — L. J. Richards & Co., shoes, started up new factory. — Freeman & Johnson, shoes, dissolved; business continued by Geo. L. Freeman under style of Geo. L. Freeman & Co. — Dickinson Shoe Co. succeeded by Dickinson & Cobb. — Following shoe firms dissolved: S. J. Hollis & Co., Richard Bros., and J. L. Towne & Co. — Johnston Leather Coat Co. dissolved by Supreme Judicial Court. — Bachelder & Lincoln granted their men nine-hour day. — Strike occurred among Welch & Landregan's cutters. *May.* L. J. Richards & Co. discarded lasting machines. — L. B. George, formerly of George & Bro., cut soles, died, aged 68 years. — Boston Lasting Machine Co. leased rooms for lasting machine school. — Hoyt & Rowe established to manufacture slippers. — Changes in firms for month: Sweetland & Bailey, shoe patterns, dissolved, business continued by John B. Sweetland; George & Bro., cut soles, succeeded by H. M. George & Co.; John R. Story, shoes, succeeded by Harris & Story; Timothy Riordan & Co., shoes, and H. W. Eaton & Co., soles, dissolved. — Strikes for month: employes of Edw. L. Burwell, Creighton Bros. (lasters), Welch & Landregan (cutters), and Faunce & Spinney (cutters). *June.* Chas. M. Howard placed several lasting machines in factory. — John J. Horgan of Timson & Horgan, shoes, died, aged 24 years. — Lynn Counter Co. removed to Stillwater, N. Y. — John P. Spinney, retired shoe manufacturer, died, aged 68 years. — Breed & Son began erection of new factory to be occupied by Lynn Box Co. — James Phelan's new shoe factory dedicated. — Mower & Cross, shoes, dissolved; everything sold but machinery and fixtures; no successor. — Lynn Stain Co., shoe stains, sold out to Walter E. Lummus. — New York Shoe Manufacturing Co. began erection of factory at Ipswich; to be of wood, 50 x 150 feet, two stories. — Thos. G. Plant Co., shoes, incorporated; capital stock \$150,000. *July.* Portion of factory C of Thomson-Houston plant ran nights. — Emery wheel burst at River Works of Thomson-Houston Co. — S. N. Breed, shoes, put in 750 horse power engine at factory. — N. D. C. Brown, cut soles, shut down for balance of year. — Reduction of employes made at Thomson-Houston Works. — H. Y. Emery, shoes, retired from business, no successor. — Geo. Faulkner, leather, employed no workmen during July and August. — Deaths for month: Jas. H. Aborn, shoes, aged 57 years and S. B. Fuller, shoes, aged 63 years. — Factory of Lynn Last Co. damaged by fire. *August.* A. F. Smith's shoe factory ran on half time. — Welch & Landregan, shoes, secured quarters in Salem and will remove to that city. — Thomson-Houston Works ran but three days a week, and iron foundry, steel foundry, pattern shop, and machine shop shut down indefinitely, owing to dull trade. — Rollins & Glazier, machinists, reduced persons employed from 24 to 7. — W. G. S. Keene, shoes, died, aged 50 years. — Gaffrey & Hardiman started up new shoe factory. — New nailing machines set up in Plant Co.'s shoe factory. — P. Lennox & Co., morocco, resumed operations after shutdown owing to dull trade. — Harnden & Blanchard, shoe stock, closed factory during months of August and September. — Strike occurred among cutters in F. W. Breed's factory. *September.* Thomson-Houston Works resumed operations with reduction in wages. — D. J. Crowley & Co., boots and shoes, sold out. — Lynn Box Co. occupied new quarters. — Kallock, Logan, & Co., shoes, dissolved; business continued by T. H. Logan. — Kallock & Earp began manufacture of machine-turned slippers. — Factory of Wm. Lummus, sheepskin finisher, closed during August and September. — E. G. Wallace, shoes, died, aged 70 years. — Strike of employes occurred in T. G. Plant Co.'s shoe factory. *October.* Pevear & Co., morocco, started up factory. — Lambert Jackson, bookbinder, added new automatic machine for manufacture of memorandum-book covers, the invention of Willard P. Jackson, son of Lambert Jackson. — Moses Norris, morocco, died, aged 83 years. — Operatives in Faunce & Spinney's shoe factory started an insurance association by which a member unable to work may draw \$5 per week for ten weeks, and in case of death the widow or child will receive \$50; dues ten cents per week. — M. H. Whittredge, shoes, shut down indefinitely. — Strikes for month: T. G. Plant Co. (stitchers), A. F. Smith (lasters), J. C. Carr (edgemakers), and A. M. & J. H. Preble (edgemakers). *November.* Thomson-Houston Electric Co. reduced wages and ran on short time; later in month increased force and working time. —

**E. & E. W. Crowell** began manufacture of boots and shoes. — New stock company formed to manufacture mirrors by new process. — **F. W. Breed**, shoes, reduced wages. — **A. F. Smith** discharged lasters; shoes hereafter to be lasted by process invented by Mr. Smith. — Strike occurred among button-hole makers in **F. W. Breed's** factory.    *December.* **E. M. Lapierre** removed factory to new location and erected addition. — **Pevear & Co.**, morocco, ran on half time. — **A. F. Smith**, shoes, closed Boston store.

**MALDEN.** In January, private firm of **Wadsworth, Howland, & Co.** became a corporation; capital stock \$200,000.    *February.* Controlling interest in **Cochrane Carpet Works** purchased by New York and Philadelphia syndicate.    *March.* **Hugh K. Moore**, organizer of **American Steam Gauge Co.**, died, aged 77 years. — Strike occurred among employes of **A. B. Palmer** and **W. B. Keen & Sons**, carriage makers.    *April.* New factory of **Robinson Bros.** completed; brick, 208 x 65 feet, three stories; 150 hands to be employed in manufacture of fancy soaps. — Repairs made and stock taken at **Boston Rubber Shoe Co.'s** plant. — New knitting machinery placed in **Collins Knitting Mill**. — Foundation laid for addition to **Gould Bros.' herb factory**; to be of wood, 59 x 29 feet, two stories. — **Cochrane Carpet Co.** ceased manufacturing; **John Cochrane, Jr.**, ran on temporary lease to close out stock.    *May.* Work begun on **Jordan & Christie's** new brush factory; to be of wood, 50 x 133 feet, three stories, with brick boiler house, 28 x 34 feet; completed in September.    *June.* Work begun on addition to **Collins Knitting Mill**. — Foundation laid for engine and boiler house at **Boston Rubber Shoe Co.'s** works; to be of brick, 45 x 42 feet and 40 x 53 feet, one story.    *July.* **Boston Rubber Shoe Co.** began erection of building to be used as cement and varnish house; brick and stone, 60 x 70 feet, two stories; also factory to be used for finishing; brick and stone, 235 x 102 feet, three stories.    *August.* **Massachusetts Wire Co.** disposed of its business to the **United States Wire & Cable Co.**, a New York corporation, which later in the year went out of business; **Malden factory** closed — Following shutdowns occurred during the month: **Boston Rubber Shoe Co.**, **S. E. Vaughan's** box factory, **Tate & Co.'s** wire factory, and **Henry L. Albee & Co.'s** furniture factory.    *September.* **Jordan & Christie** began manufacture of brushes in new factory.    *October.* **Webster & Co.**, tanners, resumed operations after shutdown. — **Grip Machinery Co.** incorporated; capital stock \$15,000.    *November.* Plans completed for **Faulkner Machine Co.'s** factory; to be of wood, 100 x 40 and 35 x 25 feet, two stories.

**Mansfield.** In June, **Crook Bros.**, of **Wrentham**, arranged to start yarn mill in this town. — **John Gledhill's** wool cleansing establishment damaged by fire.    *November.* **Crook Bros.** completed new mill to take place of one destroyed by fire at **Wrentham** in February.

**Marblehead.** In January, **Bird & Stevens**, shoes, started up after brief shutdown for stock taking. **Thomas Blackler & Co.**, **Robert H. Union**, and **Litchman Bros.**, shoes, shut down temporarily. — **Larrabee & Keefe** established to manufacture shoes.    *February.* **R. B. Harris**, shoes, increased capacity of factory. — **John W. Reynolds** retired from firm of **John W. Reynolds & Co.**, shoes; business continued by **Joseph Daley**.    *March.* Factory of **Trefrey Shoe Co.** destroyed by fire.    *May.* **E. F. Glover**, shoes, shut down for balance of year. — **Frank Mitchell**, shoes, shut down during May, June, July, August, October, November, and December.    *July.* **David Knell**, shoes, shut down for balance of year. — **John B. Litchman**, shoes, shut down for month. — Shoe factory of **John Dooling** destroyed by fire. — **Chadwell Tucker** and **Wm. F. Roundy, 2nd**, shoes, employed no persons during entire month.    *September.* **John Proctor**, shoes, shut down for balance of year.    *October.* **E. V. Bartlett**, shoes, died. — **Frank Millett Shoe Co.** employed no workmen during October and November. — **Wm. H. Boynton & Son**, shoes, employed no workmen during entire month.    *November.* Shoe factory of **Herbert Lefavour** started up under management of **Joseph** and **Wm. Lefavour**.    *December.* **Geo. W. Brown**, glue, occupied **W. H. Brown's** factory at **Peabody** and ran it in addition to present factory at this place. — **Nathaniel E. Lindsey's** shoe factory damaged by fire. — **John B. Litchman**, shoes, increased floor space in **Association factory No. 1**. — Business of **Geo. Hooper, 2nd**, closed owing to death of Mr. Hooper; no successor. — **Western Shoe Co.** organized and leased factory formerly occupied by **Wright Bros.** and set up new machinery. — No persons were employed in shoe factory of **Edward Lefavour** during month.

**MARLBOROUGH.** In January, **A. B. Howe & Co.** added sash and door making to other business. — **Chase, Merritt, & Co.**, shoes, resumed operations. — **Germania Electric Co.** completed new power house. — **Bills & Goddard**, cigars, dissolved; business to be continued by each, independently. — **Daniel F. O'Connell** retired from **John O'Connell & Sons**, shoes; business continued by remaining partners under same firm name. — *February.* **Standard Oil Co.** completed new boiler house. — **Chase, Merritt, & Co.** added new heel-slugging machinery.    *March.* **E. N. Dearborn** sold out his interest in firm of **Hollis, Dearborn, & Gale**, shoes. —

Rice & Hutchins, shoes, purchased land. — New engine in S. H. Howe Shoe Co.'s factory started. — Feary Bros., spools, ran nights. — New boiler set up in S. H. Howe Shoe Co.'s factory. — J. B. Billings, shoes, shut down for repairs. — New matching machinery placed in E. F. Longley's box factory. *April*. Marlborough Awl & Needle Co. formed to manufacture steel awls and needles; capital stock \$8,000. — A. F. Emery & Co., shoes, shut down. — Chase, Merritt, & Co. added new boiler. *May*. S. H. Howe Shoe Co.'s storehouse completed. — Middlesex Factory shut down for one week. *June*. Foundation of addition to J. F. Davey's machine shop completed; building to be of wood, 30 x 70 feet, four stories. — New boiler added to E. F. Longley's box factory. *July*. Germania Factory shut down partially. — New 12 horse power boiler and engine placed in M. C. Wheeler's machine shop. — Foundation of gas plant started for Marlborough Gas Light Co.; to be of brick with granite trimmings, 30 x 114 feet, one story. — Chase, Merritt, & Co., shoes, made repairs. *August*. E. C. Lincoln's shirt factory shut down on account of dull trade. — Boyd & Corey Boot and Shoe Manufacturing Co. ran three days per week. *October*. H. S. Moore established manufacture of children's shoes. *November*. Machinery set up in Marlborough Awl and Needle Works. — Middlesex Shoe Factory started up after temporary shutdown for stock taking. *December*. S. H. Howe Shoe Co. posted notice of cutdown in wages to take effect January 6, 1894. — J. A. Frye, shoes, reduced wages.

**Maynard.** In July, Assabet Manufacturing Co., woollens, made changes in looms and added new 300 horse power boiler; ran but five days per week during repairs. *October*. Wages of operatives in Assabet Manufacturing Co. reduced. *December*. Assabet Manufacturing Co. ran four days per week.

**Medfield.** In July, bonnet wire covering factory of Moses F. Clark & Co. destroyed by fire; rebuilt. During August the firm was dissolved and business continued by William Marshall.

**MEDFORD.** In January, Warren Mansur, cracker manufacturer, died, aged 54 years. *March*. Strike occurred among employes of Teele & Hill, carriages. *April*. A. S. Symmes, carriages, granted employes ten hours' pay for nine hours' work. *May*. West Medford Paper Co. organized and purchased land for erection of mill, to be of wood and brick, 100 x 260 feet, one story; foundation started in June. — Wainwright Manufacturing Co.'s plant leased to Eastern Syndicate. *August*. A. L. Mariner and H. C. Buck established manufacture of experimental machines. *December*. P. McGowan & Co.'s tannery damaged by fire.

**Medway.** In April, U. S. Linen Co., of Maine, purchased Campbell paper mill privilege to manufacture lint. *May*. New boiler added to F. F. Hayes' canning establishment. *June*. Vose & Cutter Manufacturing Co. formed to manufacture roller chafe irons; capital stock \$5,000. *July*. New England Awl & Needle Co. resumed operations. *August*. Sanford Woollen Co. shut down indefinitely. *September*. Repairs made at Ray & Wilson's wadding mill. — *October*. Ray & Wilson's cotton mills started up.

**Melrose.** In April, Olin F. Ingalls, lumber, died, aged 40 years. *May*. Middlesex Ice Co. incorporated; capital stock \$100,000. — F. P. Baker Moulding Manufacturing Co. dissolved by Supreme Judicial Court. *August*. Ladd & Putnam began manufacture of wax for shanks, heels, and bottoms of shoes. *October*. S. A. Carleton, hats, died, aged 45 years. *November*. William Bailey, said to be the oldest nail manufacturer in the world, died, aged 92 years.

**Mendon.** In October, Whiting box and shoddy mills totally destroyed by fire.

**Merrimac.** In March, J. B. Judkins & Sons Co. enlarged plant. *November*. Charles Bridges began manufacture of boots and shoes.

**Methuen.** In January, C. C. Briggs enlarged wool-scouring and carbonizing mill and added new scouring machine. *February*. B. T. Wendell, yarn, made addition to factory. *May*. Henry Klous sold shoddy mills to Arlington Co. of Lawrence and purchased James Ingalls' hat factory. *June*. Knitted Fabrics Co. ran nights. — Picker room of Methuen Co. damaged by fire. *July*. Methuen Co. added new machinery. *August*. Methuen Co. shut down for six weeks and Knitted Fabrics Co. shut down for one month. *September*. Methuen Co. resumed operations last week in month. *October*. Working time at Tenney's wool hat factory reduced. *November*. Machinery for C. Frank Swain's new knitting mill set up. — Knitted Fabrics Co. started up in part. — Picker room of Methuen Cotton Mill damaged by fire.

**Middleborough.** In February, Parlor Pride Manufacturing Co. organized to manufacture stove polish; capital stock \$40,000. — Alden & Pratt, shoes, made addition to factory. *July.* Keith & Pratt, shoes, shut down for one month. *August.* Alden & Pratt dissolved; business continued by C. H. Alden & Co. — Keith & Pratt added new staying machine. *October.* Hathaway, Soule, & Harrington started up shoe factory on full time.

**Middlefield.** In January, J. E. Fenner gave up his plant in this town and organized company in Spencer, to be known as Spencer Knitting Co. *December.* Bulkley, Danton, & Co., paper, shut down.

**Middleton.** In February, basement of A. P. Tyler's shoe factory flooded, owing to break in water main. *October.* E. J. Hickey, paper, shut down to put in additional machinery.

**Milford.** In January, Milford Electric Light Co. added new machinery. *March.* Hussey Bros. added new machinery. — Excelsior Shoe Co. shut down permanently. *April.* Milford Pink Granite Co. increased number of persons employed. *June.* Milford Business Men's Association purchased land for Franklin Iron Foundry, owned by Goff & Welch, which the Association had induced to remove to this town; foundation started in July; main building to be 102 x 47 feet, one story, with monitor roof; office and pattern shop, 60 x 25 feet, two stories; pickling and shipping shop, 20 x 20 feet, two stories; core shop, 20 x 20 feet, one story; store shed, 120 x 30 feet, one story. *July.* Milford Shoe Co., Clapp, Huckins, & Temple, and Colburn, Fuller, & Co. ran four days per week. *September.* Milford Shoe Co. resumed operations with reduced force. — Colburn, Fuller, & Co. shut down temporarily, starting up in October with reduced force and wages. *November.* Post Office Box Factory reduced number of persons employed. — Greene Bros. resumed operations.

**Millbury.** In January, Richard T. Buck, proprietor of Riverlin Edge Tool Works, died. — Aldrich Woollen Mills shut down for few days on account of accident to engine. *February.* John Rhodes Warp Co. added two new speeders. *March.* Crane & Waters Co. shut down for repairs. — Edwin Hoyle & Son, woollens, added three new looms. — Work begun on new shops for C. D. Morse Manufacturing Co.; one building to be 64 x 20 feet, one story, with two-story extension, 16 x 14 feet; main building to be 63 x 42 feet, two stories with addition, 32 x 20 feet, two stories; completed in April. — Hosiery mill of Crane & Waters Co. damaged by explosion. *April.* Card room of Crane & Waters Co.'s hosiery mill damaged by fire. *May.* A. J. Underwood of Worcester purchased H. T. Merriam's foundry. — H. T. Merriam purchased land for erection of new foundry; to be of wood, 58 x 36 feet, one story; also machine shop, 56 x 25 feet, two stories. — Edwin Hoyle & Son shut down temporarily; resumed operations in June. *June.* Twenty-four new looms placed in Cordis Mills. — Whitney, McDuff, & Co. added new machinery. — M. A. Lapham made addition to mill. *July.* H. W. Hakes Manufacturing Co. started up after brief shutdown. — C. T. Aldrich, satinets, shut down to add new machinery. — A. J. Underwood & Co. made improvements in and added new machinery to foundry. — Weaving and finishing rooms of Lapham's woollen mills resumed operations. — Cordis Mills shut down for four weeks, owing to lack of orders. — Chas. Buck, edge tools, added new 80 horse power boiler. — Whitney, McDuff, & Co., linen thread, increased capacity and employed extra hands. *August.* Millbury Cotton Mills resumed operations after brief shutdown for repairs. — Buck Edge Tool Co. started up in new factory. — Crane & Waters Co. and M. A. Lapham ran with reduced force. *September.* Work begun on addition to C. D. Morse & Co.'s plant. — Cordis Mills added new machinery. — Following mills started up: M. A. Lapham, John Rhodes Warp Co. and Cordis Mills, with cutdown in wages. *October.* John Rhodes Warp Co. shut down its two mills. — Break in engine at Buck Edge Tool Works caused brief shutdown for repairs. — Satinet mills of C. T. Aldrich ran but eight hours a day. — M. A. Lapham, woollen goods, died. — Crane & Waters Co. started up portion of machinery on hosiery and knit goods after long shutdown. — Woollen mills of M. A. Lapham closed one day on account of funeral of Mr. Lapham. *November.* Crane & Waters Co. ran on full time with reduction in wages. — E. Hoyle & Son resumed operations. — John Rhodes Warp Co. started up Pinafore Mill after month's shutdown. — Strike occurred among splinters in Aldrich Woollen Mills. *December.* Atlanta Mills, yarns, resumed operations. — Crane & Waters Co. shut down for three weeks. — Buck Edge Tool Works started up after ten days' shutdown. — John S. Rich's shoddy mill totally destroyed by fire. — Whitney, McDuff, & Co. made reduction in wages. — John H. Lyon & Co., New York, severed connection with Dority Mill Co.; mill ran but four months during past year.

**Millis.** In January, Millis electric light plant slightly damaged by explosion; shut down for repairs. *August.* Steel Edge Stamping & Retinning Co. made reduction in wages. *October.* New stockhouse, 60 x 25 feet, two stories, completed at Walte's felt mill.



**Milton.** In February, T. Strangman & Co. enlarged factory. *March.* Strike occurred among employes of T. Strangman & Co.

**Monson.** In January, D. W. Ellis & Son's woollen mill shut down owing to accident to main shaft. *May.* D. W. Ellis & Son started up after shutdown for repairs. *July.* Weave and card rooms of R. M. & Theo. Reynold's woollen mill shut down for two weeks; started up again in August. *August.* Monson Woollen Co.'s mill destroyed by fire. — D. W. Ellis & Son shut down for several weeks on account of dull trade. — Hermann & Lichten, straw goods, made improvements. *September.* Reynolds' mill shut down on account of dull trade. — S. F. Cushman & Sons' woollen mills ran three days per week. *November.* D. W. Ellis & Son started up. — Branch mill of S. F. Cushman & Sons shut down.

**Monroe.** In December, James Ramage Paper Co. increased capacity.

**Montague.** In January, foundation of mill started for Keith Paper Co.; to be of brick with granite base, 300 x 41 feet, four stories. *February.* Clark Machine Co. ran nights. *March.* Keith Paper Co. made additions. *April.* Keith Paper Co. added new machinery. *May.* Montague Paper Co. made improvements. *June.* John Russell Cutlery Co. shut down two weeks for repairs. *July.* Keith Paper Co. began new stockhouse. *September.* Turner's Falls Cotton Mills ran on half time. *November.* Montague Paper Co. added two new boilers. *December.* New Keith Paper Mill completed and machinery set up.

**Monterey.** In December, Berkshire Electric Light, Heat, and Power Co. organized; capital stock \$10,000.

**Natick.** In February, Driscoll & Eaton Manufacturing Co.'s shoe shop destroyed by fire. *March.* W. T. Hanchett, shoes, died. *May.* Strike occurred among reed workers in Phoenix Rattan Co. *June.* Newell Cooper's shirt factory damaged by fire. *July.* Driscoll & Eaton Manufacturing Co. shut down temporarily. *September.* W. F. Pfeiffer & Co., shoes, resumed operations.

**Needham.** In August, Waban Paper Mills destroyed by fire.

**NEW BEDFORD.** In January, new company known as Enterprise Felt Hat Manufacturing Co. formed to manufacture men's felt hats. — New Bedford Copper Co. made improvements. — Howland Mills provided means for carrying its help to and from work. — New Bedford Brass Foundry established manufacture of castings and brass railing. — One hundred and twelve looms placed in new Hathaway Mill and work begun. — Bristol Manufacturing Co.'s new mill for manufacture of print cloth completed. — New mill of Columbia Spinning Co. began operations. — Taber Art Co. incorporated; capital stock \$300,000. — Weeden Manufacturing Co. reduced capital stock \$38,000. — Foundation of addition to Hiram Wheaton & Sons' soda water factory completed; building to be of wood, 60 x 29 feet, two stories. *February.* Howland Mills Co. made addition to plant. — Grinnell Iron Foundry changed hands. — Willson & Knapp Manufacturing Co. retired from business; no successor. *March.* Potomaska Mills Corporation added new machinery. — Ground broken for addition to Columbia Mill; to be of brick, 24 x 22 feet, and to be used as horse shed. — Strike occurred among carders in Wamsutta Mill No. 6. — Wm. H. Crook, shipsmithing, discontinued; no successor. *April.* Hathaway Mill shut down owing to accident to main shaft. — Columbia Mills Co. voted to increase capital stock to \$750,000. — Foundation of new cotton mill for Columbia Spinning Co. started; to be of brick, 307 x 134 feet, three stories. — Work begun on addition to buildings of Howland Mills Corporation. — Strikes for month: Employes of Geo. L. Brownell, carriages; Clarence Lowell, carriages; and mule spinners in Hathaway Manufacturing Co.'s No. 1 mill. *May.* Bennett Manufacturing Co. increased capital stock \$400,000. — Hathaway, Soule, & Harrington, shoes, added new machinery and increased plant. — Lambeth Rope Co. incorporated; capital stock \$125,000. — Wamsutta Mill Co. began erection of weave shed 214 x 127 feet, three stories. — Bristol Manufacturing Co. added new machinery. — New engine placed in Bennett Mills. — Strike occurred among doffers in New Bedford Manufacturing Co. — Fires for month: Wm. H. Washburn, sash and window frames; Ullman Manufacturing Co., picture frames; and picker room of Hathaway Mill No. 2. *June.* Rotch Spinning Co. voted to increase capital stock from \$500,000 to \$750,000. — Mt. Washington Glass Co. shut down for six weeks. — Addition, 54 x 25 feet, made to boiler house of Bennett Mills. — W. H. Washburn and Ullman Manufacturing Co., whose plants were destroyed by fire in May, leased new quarters and resumed manufacturing. — Office of Grinnell Manufact-

uring Co. enlarged. — New Bedford Machine Shop reduced persons employed from 18 in May to nine in June and to one in September. *July.* Foundation of new cotton mill for Rotch Spinning Co. begun; to be of brick, 130 x 475 feet, two stories. — Morse Twist Drill and Machine Co. decided not to run Saturday afternoons during summer. — Grinnell Manufacturing Co. added new pump house. — Bennett Manufacturing Co. reduced force owing to dull trade. — Acushnet and Hathaway Mills made improvements. — Blossom Bros. began operations at Wilcox Planing Mill. — Shutdowns for month: Onoko Mills Co., temporarily for repairs; Hathaway, Soule, & Harrington, shoes, for two days each week; and John McCullough, ship bread, for balance of year. — New Bedford Street Transportation Co. incorporated; capital stock \$25,000. *August.* Work begun on rope walk for Lambeth Rope Co.; to be of brick, 40 x 800 feet, one story. — Wm. J. Rotch, president of Rotch Spinning Co. and other manufacturing concerns, died, aged 74 years. — Pairpoint Manufacturing Co., silverware, ran four days a week. — Wamsutta Mills made improvements in machinery. — Morse Twist Drill and Machine Co. enlarged plant by addition, 90 x 36 feet, three stories. — Hathaway, Soule, & Harrington, shoes, resumed operations on short time. — New machinery placed in Pierce Cotton Mills. — The following mills shut down for month owing to dull trade: Bennett No. 1, Columbia, Pierce, Potomska No. 1, New Bedford, Wamsutta, Weeden, Howland, and Rotch Spinning Co. — New Bedford Copper Co. and J. C. Rhodes & Co.'s eyelet factory started up after shutdown. *September.* Operations resumed by following mills: Acushnet, Hathaway No. 2, City No. 2, Wamsutta, Pierce, Bristol, Columbia, Bennett, Howland, and Rotch. — New engine added to Bennett Mill No. 1. — Work begun on addition to factory of Morse Twist Drill and Machine Co. — Strikes for month: Hathaway Mill No. 1 (carders and pickers), Acushnet Mills (doffers and back boys), Bristol Mills (speeder tenders). *October.* New cotton house completed for Columbia Spinning Co., 235 x 65 feet. — City Manufacturing Co.'s mill No. 1, Potomska Mill No. 1, Pairpoint Works, and Mt. Washington Glass Works resumed operations. *November.* Bennett Mill No. 1 started up after long shutdown. — Grinnell Mills shut down in part. — F. W. Luscomb Machinery Co. ran full time. — Grinnell Manufacturing Co. added new machinery to picker room. — Acushnet Mills shut down partially owing to accident to engine. — New electric plant erected. — City Manufacturing Co.'s mill shut down temporarily. *December.* New member admitted to firm of Brownell & Co., paints. — Pairpoint Silver Works shut down for two weeks. — New machinery placed in Rotch and Wamsutta Mills. — Following mills resumed operations: Columbia Mill on full time, Potomska Mill No. 2 in part, and weaving room of Potomska Mill No. 1. — Davis & Hatch succeeded by Davis & Hatch Spice Co., F. E. Fowler proprietor.

**Newbury.** In October, real estate, stock, and machinery of Byfield Woollen Mills sold at auction to Jacob F. Brown of Boston. *November.* Byfield Woollen Mills resumed operations temporarily.

**NEWBURYPORT.** In January, C. E. Mercy, hats, added new machinery. *February.* J. L. Currier began manufacture of shoe patterns. *March.* Whitefield Mills dissolved by Supreme Judicial Court. — Peabody Mills increased wages. — Teel & Gorwalz began manufacture of heel stiffenings. — Strike occurred among C. E. Coffin & Co.'s finishers. *May.* Victoria Mills Corporation incorporated; capital stock \$75,000. *July.* After one week's shutdown, Newburyport Car Manufacturing Co. resumed operations. — C. E. Coffin & Co., hats, shut down for two weeks. — Victoria Cotton Mills added new machinery and made improvements. *August.* Peabody Mills shut down for two weeks. — W. H. Noyes & Bro., combs, ran five days a week. — Newburyport Car Manufacturing Co. and Newburyport Hat Factory shut down; resumed operations in September. — Following firms resumed operations: E. P. Dodge Shoe Manufacturing Co., Newburyport Shoe Co., Dodge Bros., E. F. Tibbetts, and Towle Manufacturing Co. *September.* Peabody Cotton Mills started up after five weeks' shutdown. *October.* Newburyport Car Co.'s works resumed operations after five weeks' shutdown. *November.* E. P. Dodge Shoe Manufacturing Co. ran full time. — Fur department of Coffin & Co.'s hat factory resumed operations. *December.* Addition made to cloth department of Victoria Mills.

**NEWTON.** In January, foundation of addition to Nonantum Worsted Co.'s factory started; to be of brick, 100 x 72 feet, four stories. — Work begun on foundry and boiler house for Pettee Machine Works; buildings to be of brick and iron, 250 x 100 feet, one story. *April.* Factory of United States Fireworks Co. damaged by explosion. *May.* Glue works of Hugh Kelley destroyed by fire. — Elliott Hickory Cycle Co. merged into Pope Manufacturing Co.; old corporation dissolved by Supreme Judicial Court. *June.* Mill of Finlay Paper Co. started up. *July.* Chas. S. Crain, president of Elliott Paper Box Co., died, aged 58 years.

**August.** After brief shutdown, Phipps & Train's silk mill resumed operations on half time. — Nonantum Worsted Co. added new machinery. — Newton Rubber Co. shut down for two weeks; increased capital stock \$20,000. **September.** Robert Bishop's cotton waste mill damaged by fire. — Newton Rubber Co. increased capital stock to \$20,000. — W. S. & F. Cordingly, shoddies, added new boiler. **October.** Pettie Machine Works discharged 150 men and reduced working hours to 44 a week, with reduction in wages. — Newton Rubber Co. shut down indefinitely. — Cordingly Mills resumed work with half the number of workmen and Dudley Hosiery Mills with a cut in wages. **November.** Newton Rubber Co. shut down. — New machinery placed in Nonantum Worsted Mill. **December.** Nonantum Worsted Co. reduced wages.

**Norfolk.** In May, brick addition, 50 x 40 feet, made to City Mills Co.'s felt factory, and in October foundation laid for new dyehouse. **November.** J. L. Fisher's canning factory ran nights. **December.** Norfolk Woollen Co.'s mills shut down indefinitely.

**North Adams.** In January, Swift Refrigerator Co. leased land for erection of new refrigerator building, 105 x 25 feet, two stories. — Greylock Mills resumed operations. **February.** New company known as Berkshire Cycle Co. formed to manufacture bicycles. **March.** Jas. Hunter Machine Co. established manufacture of shafting couplings. — Overflow dam of Johnson Manufacturing Co. carried away. — Strike of weavers occurred in Johnson Manufacturing Co.'s mills. **April.** Singeing department of Windsor Print Co. damaged by fire. — Arnold Print Works shut down for repairs. — A. S. Farnum & Bro., Cheshire, purchased the Whipple lime kiln. — Eclipse Mill shut down owing to accident to water wheel. — Two hundred and fifty horse power engine placed in Dunbar Mills. — Wm. G. Cady & Co., shoes, made improvements. **May.** Windsor Print Co. added new engine. — Blackinton Woollen Co. transferred plant and property to Blackinton Co., a corporation organized under laws of New York; capital stock \$600,000. — W. G. Cady & Co., shoes, ran on half time. **June.** T. M. Colman, cigars, recently burned out, resumed operations in new factory. — North Adams Manufacturing Co., woollens, purchased water privilege from D. M. Wells. — Repairs made on water wheel at Greylock Mills. **July.** W. G. Cady & Co., shoes, and Windsor Print Works shut down temporarily. **August.** S. Blackinton Woollen Co. cut down persons employed from 334 in June to 107 in July and 41 in August, with reduction in wages. — Bartlett Bros.' saw mills destroyed by fire. — W. G. Cady & Co., shoes, resumed operations on half time. — C. F. Sampson Manufacturing Co., shoes, and Windsor Print Works ran three days a week. — Shutdowns for month: Dunbar Mills for two weeks; Canedy & Wilkinson, shoes, for stock taking; Greylock Mills for improvements; and D. J. Barber & Sons, leather, in part. **September.** C. F. Sampson, shoes, died, aged 67 years. — Windsor Print Co. increased working time from three to four days per week. — Following mills started up: Dunbar, on half time; Blackinton Co., with 338 persons employed; Arnold Print Works, with reduced force. **October.** New engine set up in gas works plant. — Greylock Mills closed indefinitely. — Indigo department of Arnold Print Works resumed operations with reduction in wages. — Windsor Print Co. started up on full time. — C. F. Walker began erection of new bobbin factory. **November.** Greylock Mills started up with reduction in wages. — Arnold Print Works started up in full. — Spinning and carding rooms of Johnson Manufacturing Co. started up and running time of other departments increased. — Blackinton Co. increased running time. — Two dyeing machines placed in Arnold Print Works. — Beaver and Eclipse Mills ran on full time. **December.** Linwood Woollen Mills reduced wages. — Greylock Mills started up on full time. — Jas. Hunter Machine Co. posted notice of reduction in wages on account of dull trade. — W. G. Cady & Co. ran full time.

**NORTHAMPTON.** In January, Northampton Cutlery Co. made improvements. — Woods Cutlery Co. shut down for repairs. **February.** John N. Leonard, silk goods, died, aged 53 years. **March.** Mt. Tom Sulphite Pulp Mill ran overtime. **April.** Brown & Bailey, brick, began operations for season. — Norwood Engineering Co. incorporated to establish machine and foundry plants; capital stock \$10,000. **May.** Clement Cutlery Co. added new machinery. — Northampton Street Railway Co. increased capital stock \$100,000 for purpose of constructing electric system. — Addition, 40 x 150 feet, built to Mt. Tom Sulphite Pulp Co.'s mills. — Dam washed away at factory of Horace Lamb & Co.; practically no business done for three months. **July.** Holmes & Dawson leased Crosby's factory. — Central Oilgas Co. resumed operations. — Florence Furniture Co.'s factory damaged by fire. — Nonotuck Silk Co. increased capital stock \$280,000. — Horace Lamb & Co.'s wire mill started up after repairs made to dam. **August.** Norwood Engineering Co. made addition to plant. — Nonotuck Silk Co. and J. N. Leonard Silk Co. ran on half time. — Boston Cash Register



man Perkins & Son shut down. *December.* Standard Thermometer Co. changed from private firm to corporation; capital stock \$125,000. — Eagan & Kelly dissolved; business continued by Edward Eagan & Sons.

**Pepperell.** In March, Nissitissit Mills changed from leather-board to asbestos paper and mill board. *April.* Leighton Bros.' shoe factory and Fairchild Paper Co.'s lower mill shut down. *August.* Fairchild Paper Co. equipped plant with steam fire pumps. — Leighton Bros. shut down; resumed operations in September. *October.* Burnett Paint Co. incorporated; capital stock \$5,000. *November.* John W. Pierce's grain mill sold to G. A. Jennison. *December.* Champion Card and Paper Co. started up. — J. G. Boutelle Co. incorporated; capital stock \$5,000.

**PITTSFIELD.** In January, A. H. Rice & Co. bought plant of Barnes Braiding Co. of Paterson, N. J.; work begun on wooden structure, 60 x 30 feet, two stories, to accommodate purchased machinery. — Cheshire Shoe Manufacturing Co. ran overtime. — Twenty-five new looms added to Pomeroy Mill. — Machinery set up in W. E. Tillotson's new knitting mill. — Gale Brothers, carriages, dissolved; A. D. Gale continued. — Pontoosuc Woollen Manufacturing Co. added ten new looms. — Pomeroy Woollen Co. incorporated, succeeding private firm of Theo. L. Pomeroy; capital stock \$75,000. — Two new cards added to Taconic Mills. — W. H. Teeling & Co. changed from private firm to corporation (Teeling Baking Co.); capital stock \$20,000. — New machinery added to A. H. Rice & Co.'s silk mill. — D. M. Collins & Co.'s knit goods plant removed to new Tillotson Mill. *February.* Pittsfield Shoe Co. completed sale of plant to Robbins & Kellogg Co. — Stanley Electric Manufacturing Co. increased capital stock \$50,000. *March.* Devanney & Foote, builders, succeeded by Dodge & Devanney. — Wilson & Horton, woollen goods, leased upper Barkerville mill which had been shut down for three years. — Pomeroy Woollen Co. put in three new fans and new extractor. — Strike occurred among employes of A. H. Rice & Co. *April.* Contract awarded for addition to Robbins & Kellogg shoe factory; to be 25 x 60 feet, four stories. — Pomeroy Woollen Co. ran card and spinning room nights. — E. D. Jones Sons & Co. incorporated to manufacture paper mill machinery; capital stock \$6,000. *May.* Excavation begun for new finishing room, 35 x 60 feet, at Taconic Mills. — Ground broken for new dyehouse at Peck Manufacturing Co.'s mill. *June.* Stockholders of Stanley Electric Manufacturing Co. voted to increase capital stock to \$200,000. — Tillotson's worsted mill ran nights. — Insulating department of Stanley Electric Manufacturing Co. destroyed by fire; to be rebuilt. *July.* Pontoosuc Woollen Co. put automatic sprinklers in its mills. — Pittsfield Manufacturing Co. and dyehouse of Bel Air Manufacturing Co. shut down for repairs. *August.* S. N. & C. Russell Manufacturing Co. shut down for entire month on account of dull trade. — Cheshire Shoe Manufacturing Co. and Pontoosuc Woollen Co. resumed operations. — P. C. Langdon & Co.'s new renovating factory completed. — R. A. Simyer & Co. leased rooms for manufacture of woollen and cotton specialties. — Wilson & Horton and D. M. Collins & Co. shut down indefinitely. — A. H. Rice & Co.'s silk mill ran on two-thirds time. — Planing mill and lumber yard of Charles E. Merrill damaged by fire. *September.* Peck Manufacturing Co.'s upper mill shut down for two weeks to move machinery. — Plant of Russell & Clark Co. sold to Hurlbut Paper Manufacturing Co. of South Lee, for manufacture of stationery. — Barkerville Woollen Mill resumed operations after three weeks' shutdown. *October.* Work resumed at Wm. E. Tillotson's woollen mill. — Directors of Stanley Electric Manufacturing Co. voted to increase capital stock to \$200,000. — Owen Coogan & Sons, tanners and curriers, shut down. — Cheshire Shoe Manufacturing Co. ran works three days a week. — Property of Russell & Jones Clock Co. transferred to A. W. Eaton, paper manufacturer. *November.* Tillotson Mills ran fifty hours per week. — Russell Manufacturing Co. ran nights. — New dye tub placed in Wilson & Horton's mill. *December.* Reduction made in wages in S. N. & C. Russell Manufacturing Co.'s mill. — Barkerville Woollen Mill shut down. — Wilson & Horton reduced wages. — W. E. Tillotson's woollen mill slightly damaged by fire.

**Plymouth.** In January, Atlantic Covering Co. formed. — Plymouth Electric Light Co. increased capital stock \$50,000. — Standish Mills, which had been idle for four years, sold, and in May the Standish Worsted Co. incorporated to operate the plant, with a capital stock of \$20,000. *April.* Travis Bros.' Shoe Co. incorporated; capital stock \$7,000. *August.* Addition begun to Bradford Joint Co.'s mill. *September.* Edes Manufacturing Co. incorporated, replacing private establishment of Edwin L. Edes; capital stock \$25,000. *November.* Plymouth Cordage Co. ran nights.

**Plympton.** In July, G. W. Randall, shoes, shut down for balance of year.

**Provincetown.** In June, Provincetown Cold Storage Co. organized; capital stock \$15,000.

**QUINCY.** In February, W. H. Doble Co. incorporated; capital stock \$20,000. — New planer set up in M. H. Ripley's tool manufactory. — Tubular Rivet Co. and Lacing Stud Co. discontinued as separate establishments and continued in business as The Tubular Rivet & Stud Co.; capital stock \$20,000. *March.* Strike occurred among employes of J. E. Drake & Co., shoes. *May.* Quincy Quarry Co. organized; capital stock \$175,000. — Foundation of three factory buildings for Tubular Rivet & Stud Co. started. *August.* Graham & Co., shoes, resumed operations after shutdown of two weeks on account of dull trade. *October.* Allen & Walker dissolved; succeeded by Aberdeen Granite Works. *December.* Fegan & Ballou's polishing mill and engine house destroyed by fire.

**Randolph.** In March, Theo. Purcell and James Dowd formed partnership for manufacture of shoes. — Chas. Doughty's harness factory collapsed. *August.* Pierce, Small, & Co., shoes, dissolved.

**Raynham.** In July, salad factory of Chase Bros. destroyed by fire.

**Reading.** In January, Emerson Rubber Mills shut down. — Beattie Zinc Works Co. formed to manufacture battery zinc, etc.; capital stock \$10,000. *March.* George H. Ryder & Co., church organs, shut down permanently. *October.* Emerson Rubber Mills shut down for balance of year.

**Richmond.** In February, one of the charcoal kilns of Richmond Iron Works destroyed by fire. — Foundation of new phosphate works laid.

**Rockland.** In January, Wright & Richards, shoes, moved into new addition to factory. — J. S. Turner, boots and shoes, made additions and improvements to factory. — Dean, Chase, & Co. absorbed by Hub Gore Makers of Brockton. *May.* French & Hall, shoes, dissolved; succeeded by French, Schriener, & Uner. — Strike occurred among lasters in Chipman, Calley, & Co.'s factory. *July.* Geo. W. Hall, formerly of French & Hall, began erection of shoe factory, 136 x 34 feet, two stories. *October.* E. T. Harwell & Co., shoes, sold out to Pratt Shoe Co. *November.* G. W. Hall began manufacture of men's shoes. *December.* J. S. Turner, shoes, died, aged 52 years. — Factory of Rockland Welt Co. damaged by fire. — J. S. Turner's shoe factory, which had been closed owing to death of Mr. Turner, started up on full time.

**Rockport.** In May, work begun on new tool factory of C. C. Fears. *July.* Rockport Electric Street Railway Co. incorporated; capital stock \$50,000.

**Rowley.** In March, S. A. Boynton, heels, shut down. *July.* F. L. Burke changed to corporation known as Burke Heel Co.; capital stock \$15,000.

**Royalston.** In February, Geo. Whitney decided to convert chair factory into woollen mill. — Mills ran on short time owing to low water. *July.* Geo. W. Whitney's woollen mill damaged by fire. — *September.* Operations resumed at Whitney Woollen Mill after brief shutdown for repairs. *December.* Geo. Whitney removed plant to Enfield, N. H.

**SALEM.** In January, Electric Brake Co. organized. — Naumkeag Steam Cotton Co. shut down temporarily owing to accident to engine. — Morocco factory of John J. Cunney destroyed by fire. — Lynn Glue Co. moved here from Lynn and changed name to Atlantic Glue Co. *February.* J. W. Reynolds & Co., shoes, dissolved; business continued by Towle & Daley. — Adamanta Manufacturing Co. dissolved by Supreme Judicial Court. — Charles Harrington & Co., leather, dissolved. — Chas. McCarthy, retired shoe manufacturer, died, aged 99 years. *March.* Daley & Hayes, shoes, dissolved. — Flint & Co., shoes, sold to Flint Bros. — Strike occurred among trimmers of Salem Electric Light Co. — Salem Press Publishing and Printing Co. increased capital stock \$15,000. *April.* Cass Bros., morocco, removed here from Peabody. — Dennis Brady, shoes, shut down for repairs and introduction of electric motor. — Foundation laid for Devlin Bros.' shoe factory; to be of brick, 40 x 85 feet, five stories. — *May.* James A. Lord, leather, out of business; no successor. — Fires for month: Poor Bros., tanners; Reed & Vaughan, leather measuring machines; Atlantic Glue Co.; and Salem Brass Foundry. *June.* Donovan & Hill, shoes, dissolved; Patrick J. Donovan continued. — A. G. Frothingham, shoes, sold trimming business to J. H. Ellis & Co. — No. 2 mill of Naumkeag Steam Cotton Co. shut down owing to accident to machinery. — James Dugan, tanner, died, aged 56 years. — Twenty-five men dropped from pay roll of Mathew Robson's currying shop owing to dull trade. — Salem Novelty Co. organized to manufacture toys and small articles. *August.*

**Naumkeag Steam Cotton Mills** shut down owing to dull trade. — **Lawrence Shaving Machine Co.** incorporated; capital stock \$100,000. — **G. F. Putnam**, tanner and currier, shut down for two weeks. — **John Powers**, shoe stock, discharged all employes. — **A. G. Frothingham**, boots and shoes, incorporated as **Boston Manufacturing Co.** *September.* **National Fibre Board Co.** closed Salem factory and moved plant to Morrisville, Vt. — Work begun on **Poor Bros.' new tannery**; plant to consist of one two-story building, 125 x 60 feet; one one-story building, 76 x 93; another, 25 x 100 feet; and brick boiler and engine house, 55 x 80 feet. — **Naumkeag Steam Cotton Mills** resumed operations with reduction in wages. — **Edward W. Pierce** of **J. W. Woodbury & Co.**, shoes, died, aged 87 years. — **Fires**: **Patrick Creedon & Co.**, curriers, and **Thos. Shea & Co.**, shoe stiffenings. *October.* **Winslow & Rogers'** shoe factory sold at auction to **Nelson & Pearl.** — **Dugan's tannery** started up on full time. — **Nevin Bagging Co.'s plant** sold to **Lynch Bros. of Beverly.** *December.* New engine placed in **Naumkeag Steam Cotton Mills.**

**Saugus.** In January, strike occurred among employes of **Coates Bros.** *March.* **Pranter Manufacturing Co.** added new looms. *September.* **F. Scott & Son** shut down for three months, resuming operations in December.

**Seabrook.** In April, **C. N. Drollet** leased shoe factory of late **G. W. Bailey** with the intention of manufacturing shoes.

**Shelburne.** In January, **Lamson & Goodnow Manufacturing Co.** shut down on account of low water. *February.* **J. C. & D. W. Temple**, marble and granite, started branch in Greenfield. *May.* Work begun on factory for **Jacob Foster & Sons**, shoe pegs; main building to be of wood, 36 x 80 feet, two stories, and storehouse, 30 x 100 feet, one story; completed and occupied in November. — **New England Cutlery Co.** removed to Springfield and reorganized. *July.* **Lamson & Goodnow Manufacturing Co.** resumed operations after summer vacation. *September.* **Mayhew Silk Mill** started up on full time. *October.* **Mayhew Silk Mill** shut down temporarily.

**Shirley.** In January, new plant of **Shirley Woollen Co.** completed; main building, 123 x 43 feet, two stories; chemical room, 40 x 40 feet, one story; dyehouse, 30 x 30 feet. *April.* **C. A. Edgarton Manufacturing Co.** decided to move to Fitchburg. *August.* **Samson Cordage Works** closed on account of dull trade; resumed operations in October and increased capital stock \$40,000.

**Shrewsbury.** In November, **C. O. Green & Co.** added new splitting machine to plant.

**Somerset.** In January, **Somerset Stove Foundry Co.** shut down for inventory and repairs; resumed operations in February. *May.* Plate mill of **Mt. Hope Iron Co.** resumed operations. — **Wilson Lace Clasp Co.** added new machinery. *August.* New engine set up in **Somerset & Johnsonburg Manufacturing Co.'s plant.** — **Cresote Works** and **Somerset Stove Foundry** resumed operations after shutdown. *September.* Machinery set up in **Hoyt, Poole, & Co.'s shoe button factory.** — Upper nail mill of **Mt. Hope Iron Works** resumed operations. *November.* **Somerset & Johnsonburg Manufacturing Co.** shut down for one week.

**SOMERVILLE.** In April, **Williams Table & Lumber Co.** incorporated; capital stock \$35,000. *May.* **Boston Magnetic Supply & Manufacturing Co.** incorporated under Maine laws; capital stock \$50,000. *July.* Work begun on addition to **Crosby Steam Gauge and Valve Co.'s works**; to be of brick, 43 x 53 feet, three stories. *August.* **North Packing & Provision Co.** reduced wages. *September.* **F. D. Weld**, ladders, sold to **McDormand, Warner, & Co.** *October.* **Edwards' naphtha and kerosene works** and **Walker's oil works** destroyed by fire. *November.* **Locke's foundry** damaged by fire.

**Southborough.** In December, **Cordaville Woollen Mills** shut down.

**Southbridge.** In February, **Blanchard & Richards** formed to manufacture improvements for eye glasses. — **Paige, Carpenter, Colburn Co.**, shoes, incorporated; capital stock \$30,000. *April.* **Hamilton Woollen Co.** started on Summer time schedule. — **Central Mills Co.** built new engine house. *June.* **Southbridge Printing Co.** ran nights. — **P. H. Carpenter Co.** incorporated; capital stock \$5,000. *July.* **Hamilton Woollen Co.** put in two new water wheels. *August.* Cassimere department of **Hamilton Woollen Co.** shut down for two weeks; other departments ran but three days per week. — **Southbridge Gas & Electric Co.** increased capital stock \$10,000. *September.* **Southbridge Printing Co.** shut down for four weeks for repairs.

— Repairs made on engine at Litchfield Shuttle Works. *October.* Hamilton Woollen Co.'s mills shut down indefinitely. — Low water caused shutdown of Central Mills for few days.

**South Hadley.** In January, improvements completed at Hampshire Paper Co.'s mill and work resumed in full. *February.* Glasgow Co.'s gingham mill damaged by fire. *March.* Glasgow Co. advanced wages of weavers; increase on gingham four cents and on coat linings nine cents. — New flumes placed in Carew Manufacturing Co.'s mill and addition built to machine shop. *May.* Office of Glasgow Co.'s plant converted into cloth room. *July.* Hampshire Paper Co. reduced persons employed from 118 in June to 10 in July. — Carew Paper Mill closed indefinitely. *September.* Repairs made in sizing department of Hampshire Paper Mill. — Glasgow Co. reduced persons employed from 234 in August to 25 in September. *October.* Manufacturing part of Hampshire and Carew Paper Mills shut down for few days. *November.* Dyehouse of Glasgow Mill resumed operations; shut down during December.

**Spencer.** In January, J. E. Fenner gave up two plants in Middlefield and organized company in this town, to be known as Spencer Knitting Co. *March.* E. E. Stone & Co. made addition to box factory by erection of new shop for packing boxes. *April.* G. P. Ladd's lower mill repaired and operations resumed. — Fires for month: No. 1 mill of Central Wire Co. and mill No. 6 of Spencer Wire Co. *May.* Spencer Woollen Co. ceased manufacturing. — Geo. P. Ladd, cassimeres, shut down mills Nos. 1 and 2 and Westville Mill. *June.* Erection of addition to Isaac Prouty & Co.'s shoe shop begun; to be of wood, 50 x 200 feet, five stories. *August.* Isaac Prouty & Co., shoes, shut down at four o'clock Saturdays during July and August owing to dull trade. — Bacon, Young, & Co., shoes, and W. A. Barr & Son, heels, ran on short time. *September.* No. 1 woollen mill, formerly run by G. P. Ladd, started up by Green & Shaw. — Fires for month: Bacon, Young, & Co., boots and shoes; E. E. Stone & Co., planing mill; J. P. Avery, machinists' work; Eldridge Leather Dressing Factory; W. T. Clark & Sons, machine shop; W. A. Barr & Son, heels; and M. J. Boyes, harnesses. *October.* E. E. Stone & Co. began rebuilding planing mill; to be of brick, 90 x 60 x 116 feet, two stories. — W. A. Barr & Son started up new heel manufactory. — W. T. Clark & Sons resumed business in new shop. — Works of Spencer Gas Co. damaged by fire. *November.* Cutting department of I. Prouty & Co.'s shoe shop resumed operations. — Bacon, Young, & Co., boots and shoes, dissolved; continued by J. E. Bacon & Co. *December.* Isaac Prouty & Co. shut down entire month. — E. E. Stone & Co.'s plant lighted by new electric system. — Spencer Gas Co. damaged by fire.

**SPRINGFIELD.** In January, J. H. Rogers Carriage Co. incorporated; capital stock \$25,000. — Work begun on foundation for new refrigerator building for Nelson Morris & Co.; to be of brick, two stories. — Quinnell & Cushing, mantels, dissolved; business continued by W. L. Quinnell. — Horace Smith, formerly of Smith & Wesson, revolvers, died, aged 85 years. — Springfield Foundry Co.'s storehouse destroyed by fire. *February.* Standard Button Co. incorporated; capital stock \$10,000. — Springfield Brass Co. increased capital stock \$20,000. — Standard Thread Co. of Newark, N. J., removed to this city. — Chadbourne & Moore of Boston purchased machinery of Springfield Narrow Fabric Co. *March.* Cutler & West, boxes, dissolved; business continued by Mr. West under old firm name. *April.* Milton Bradley Co. increased capital stock \$16,000. — Work begun on new machine shop for Chapman Valve Co.; to be of brick, 50 x 220 feet, one story. — Holyoke Card & Paper Co. began erection of new storehouse, 65 x 70 feet. — Springfield Collar Co. dissolved by Supreme Judicial Court. *May.* New England Cutlery Co. removed from Shelburne to this city and reorganized; new firm known as Rush Cutlery Co. — Springfield Drop Forging Co. incorporated; capital stock \$15,000. — Estate of E. Trask, castings, closed out business; no successor. — Brouillard & Jones, machinists, dissolved; business continued by R. Crittenden. — Abram Whitcomb, cigars, died, aged 37 years. — Granite cutters employed by Hudson & Chester Granite Co and J. E. & A. L. Pennock struck work. *June.* Rafter-Ripley Co. incorporated; capital stock \$15,000. — Springfield Knitting Co. increased capital stock \$18,000. — Machinery, etc., of Smith & Lesquereux purchased by West Winsted Optical Co. and removed to West Winsted, Conn.; Springfield plant occupied later in year by Smith & Wesson. *July.* Springfield Coil Boiler Co. incorporated; capital stock \$10,000. — Day & Jobson Co., lumber, incorporated; capital stock \$24,000. — Springfield Brewing Co. voted to reorganize. — Manufacture of new Krag-Jorgensen army rifle begun at National Armory. — New machinery placed in Conn. River R.R. shops. — Smith & Wesson closed factory entire month of July, resuming operations in August with one-third less employes. — Empire Light Co. established to manufacture an invention for filling kerosene oil lamps by gravity from a tank; capital stock \$100,000. — Building occupied by Crescent Manufacturing Co. and Springfield Brass Co. damaged by fire. *August.* Textile Manufacturing Co. of Westfield, coffin trimmings, bought out Crescent

**Manufacturing Co.** — E. S. Stacey began erection of new machine shop. *September.* Indian Orchard Co. reduced number of employes. — Wason Manufacturing Co. resumed operations after brief shutdown. — Tucker & Cook Manufacturing Co. moved into new quarters. *October.* Grant-Sawyer Confectionery Co. incorporated; capital stock \$5,000. *November.* A. C. Dutton Lumber Co. incorporated; capital stock \$35,000. — Willey Co. incorporated; capital stock \$10,000. — U. S. Compound Oxygen Co. decreased capital stock \$15,000 and increased it \$5,000. — Fire destroyed photograph gallery of Geo. Van Norman and cigar factory of M. H. Barnet. *December.* Warwick Cycle Manufacturing Co. incorporated; capital stock \$200,000. — New machinery added to Metallic Drawing Roll Co. — James Gibbins and John Swaine purchased plant of Springfield Iron Works. — Wason Manufacturing Co. shut down indefinitely. — P. J. O'Connell & Co. dissolved; no successor. — Arthur I. Bemis, hardware and tools, died, aged 63 years. — Rush Cutlery Works damaged by explosion. — Springfield Knitting Co. destroyed by fire.

**Sterling.** In March, new machine for stamping out flower pots placed in Wanshacum Pottery. *September.* Sterling Basket Co. shut down balance of year on account of dull trade. *November.* E. H. Brigham & Co., baskets, sold to B. W. Potter. *December.* Sterling Emery Wheel Co. manufactured no goods during past year.

**Stoneham.** In April, J. M. Noyes, shoes, leased factory in Lynn for term of years and moved business to that city. *June.* New machinery added to tannery of Wm. Tidd & Co. — G. H. Eaton & Co. purchased Jewett saw mill property for manufacture of machinery; destroyed by fire in July.

**Sturbridge.** In July, concrete floor put in mill No. 1 of Fiskdale Co. *October.* Fiskdale Mills started up in all departments with full number of employes.

**Sutton.** In May, D. T. Dudley & Son sold shuttle manufactory to F. A. Chase & Co. of Providence. — Spinning room of Sutton Manufacturing Co.'s mill shut down owing to high water. *June.* Part of Sutton Manufacturing Co.'s mills shut down for few days on account of bursting of flume. *July.* Mills of Sutton Manufacturing Co. closed indefinitely. *August.* Manchaug Cotton Mill shut down for one week. *September.* Shop of D. T. Dudley & Son wired for electric lighting. — Wages reduced in Manchaug Mills. *October.* Sutton Woollen Co. started up after shutdown of five weeks with reduction in wages. *November.* Sutton Manufacturing Co. started up with reduction in wages; solid granite dam constructed during shutdown.

**TAUNTON.** In January, Taunton Iron Works started up after four weeks' shutdown. — S. A. Wilde Manufacturing Co., tinware, dissolved; business continued by Deane Manufacturing Co. — Pierce Hardware Co. incorporated; capital stock \$25,000. *February.* Wire drawing department of Taunton Copper Manufacturing Co. ran nights. — Repairs at O. G. Thomas' foundry completed and operations resumed. — Main shaft in Taunton Locomotive Works repaired and operations resumed. — Changes in machinery made at Cohannet Mills. *April.* Operations suspended at Cobb Stove and Machine Co.'s works. — New looms set up in Whittenton Manufacturing Co.'s mills. — Taunton Oil-cloth Co. incorporated under title of Standard Oil-cloth Co.; capital stock \$50,000. — New boiler set up in Taunton Locomotive Works. — Taunton Dye Works and Bleachery Co. organized; capital stock \$21,000. *May.* Adjustable Stove Pipe Co. began operations. — Addition begun to Whittenton Mill and four new blanket looms set up. — Old shovel factory converted into oil-cloth factory for Standard Oil-cloth Co. — Presbrey Stove Lining Co. added new boiler. *June.* John F. McGrath began manufacture of automatic ratchet drill. — Three-story addition to Peck & White's carriage factory completed. *July.* Foundation started for office building for Nemasket Mills; red brick with granite trimmings, 55 x 47 feet, one story. — Nemasket Mills increased capital stock \$100,000. — Phoenix Crucible Works resumed operations. — New engine set up in Trefethen's Brass Foundry. — Universal Loom Co. took on new hands. — New England Stove Co. resumed operations. — Taunton Iron Works resumed operations after shutdown for repairs and inventory. — Albert Field branch of Atlas Tack Co. closed for one week. — Nemasket Yarn Mills and Cohannet Mill No. 3 ran on short time and with reduced number of employes. — Mason Machine Works closed Saturdays and Mondays. — Reed & Barton Corporation ran four days a week. *August.* Spinning department of Canoe River Mills shut down. — Taunton Crucible Co. ran on half time from first of August to end of year. — New Process Twist Drill Co. resumed operations after week's idleness. — Nemasket Mills shut down for two weeks. *September.* Weir Stove Co. shut down for few days. — Work begun on addition to White, Warner, & Co.'s plant; to be used as moulding mill. — Whittenton Mills shut

down entire month. *October.* New England Co-operative Foundry Co. made repairs about plant. — Mason Machine Works began running eight hours per day. — New engine set up in Cohannet Mill No. 3. — Taunton Iron Works resumed operations after four months' shut-down. — Taunton Nickel Plating Co. ran but four days a week. — Cobb Stove and Machine Co.'s foundry shut down. — Engine room of Canoe River Yarn Mills damaged by fire. *November.* Mason Machine Co. finished office buildings. *December.* Weir Stove Co. shut down one week for stock taking; incorporated 28th with capital stock of \$120,000. — *Taunton Herald* Co. incorporated; capital stock \$5,000.

**Templeton.** In March, Templeton Mills obliged to run nights to meet demand for yarns. *October.* J. M. Greenwood & Co. equipped factory for steam heating. — Paint shop connected with C. N. Johnson's factory destroyed by fire. *December.* T. T. Greenwood & Sons' furniture factory damaged by fire.

**Tewksbury.** In September, Atherton Machine Co. shut down. *December.* Atherton Machine Co. started up in part.

**Topsfield.** In December, Chas. Herrick, shoes, died, aged 81 years.

**Townsend.** In April, Spaulding Bros. changed from private firm to corporation known as The Spaulding Bros. Co.; capital stock \$30,000.

**Truro.** In May, North Truro Cold Storage Co. incorporated; capital stock \$15,000.

**Tyngsborough.** In June, J. G. Upton, boxes, died.

**Upton.** In July, Benson & Nelson, straw goods, closed factory for two months, retaining pattern makers only. *October.* Addition to Wm. Knowlton & Son's straw goods factory completed; 100 x 40 feet, four stories. — Upton Manufacturing Co., boxes, added new machinery. *December.* Benson & Nelson's factory destroyed by fire.

**Uxbridge.** In February, new company organized for building electric cars; capital stock \$100,000. — Jos. McKachnie, proprietor of Happy Hollow Mill, discontinued manufacturing. *March.* Break in machinery at Scott & Wheelock's mill adjusted and operations resumed. *April.* John H. Lyon & Co. of New York City purchased all personal property of Happy Hollow Mill. — Moses Taft, woollens, died, aged 81 years. — Jacob Taft, satinets, died, aged 69 years. — Stockhouse of D. Morey Lee destroyed by fire. *May.* Carding and spinning rooms at Calumet & Heckla Mills shut down for short time to put in new wheel and make other improvements; resumed operations in June. — Strike occurred among quarrymen employed by Ingerson & Nash. *July.* E. S. Farnum erected storehouse near grist mill. — Picker room of Capron Woollen Mill slightly damaged by fire. *August.* Calumet & Heckla Woollen Mills shut down indefinitely and Capron Woollen Mill for balance of year. — Scott & Wheelock's mill resumed operations after three weeks' shutdown. *September.* Chas. C. Capron shut down for balance of year. *October.* Calumet & Heckla Mills resumed operations. *December.* Richard Sayles & Co.'s Rivulet mill started up after shutdown of four months. — Scott & Wheelock mills shut down indefinitely.

**Wakefield.** In February, strike occurred among winders in Wakefield Rattan Co. *May.* Smith & Anthony Stove Co. changed to Smith & Anthony Co. and increased capital stock \$150,000. — Strike occurred among moulders in Smith & Anthony Co.'s foundry. *July.* Wakefield Rattan Co. decided not to run Saturday afternoons during summer. *December.* Wakefield Rattan Co.'s factory and Smith & Anthony Co.'s foundry shut down indefinitely. — Wakefield Rattan Co. purchased Gibbs Chair Co. at Kankakee, Ill.

**Wales.** In August, Berkeley Woollen Mills shut down for three months.

**Walpole.** In January, work begun on addition to Walpole Emery Mills. *July.* Union Mills added new machinery. — Lewis Batting Mill damaged by fire. *September.* Walpole Dye & Chemical Co., which had been running on short time, started up again in full. *October.* Walpole Woollen Mills dissolved by Supreme Judicial Court. *November.* W. I. Lewis' machine shop resumed operations. *December.* Stockhouse of F. Barlow's cotton waste mill destroyed by fire.



**WALTHAM.** In January, John Roberts & Son's paper mills shut down indefinitely owing to accident to engine. — Pickling room of Waltham Foundry Co. damaged by fire. — Strike of 300 cutters occurred in Boston Manufacturing Co.    *February.* Buildings of J. L. Thompson Manufacturing Co. wired for electric lighting. — Waltham Bleachery and Dye Works, which had been running on short time, resumed operations in full. — Waltham Emery Wheel Co. increased capital stock \$25,000.    *March.* Waltham Screw Co. leased additional floor space on account of increased business. — Sidwell & Saben established new bicycle factory.    *May.* Addition to Boston Manufacturing Co.'s dyehouse completed.    *June.* Perry Bros.' planing mill and three dryhouses of Waltham Lumber Co. destroyed by fire.    *July.* United States Watch Co. resumed operations with reduction in wages. — Waltham Electric Clock Co. shut down; started up again in August.    *August.* Waltham Emery Wheel Co. resumed operations. — Shutdowns for month: Waltham Dial Co., American Waltham Watch Co., Boston Manufacturing Co., and J. L. Thompson Manufacturing Co.    *September.* Boston Manufacturing Co. resumed operations on half time. — Waltham Bleachery and Dye Works shut down. — Boston Manufacturing Co. added new machinery.    *October.* Foundation laid for new factory building for Boston Manufacturing Co.; to be of brick, 76 x 41 feet, two stories. — Davis & Farnham Manufacturing Co. discharged 20 employes owing to dull times. — Waltham Screw Co. closed indefinitely. — Boston Manufacturing Co. added new machinery to carding and spinning departments. — New bicycle factory roofed; building of wood, 30 x 75 feet, one story.    *November.* Boston Manufacturing Co. ran eight hours per day, five days per week. — Waltham Bleachery and Dye Works ran eight hours per day and reduced wages. — Boston Manufacturing Co. made addition to cloth finishing department.    *December.* American Waltham Watch Co. made reduction in wages, and during last week in December posted notice of another cut-down to take effect Jan. 1. — J. L. Thompson Manufacturing Co., buckles, reduced force. — John Roberts & Sons' paper mill resumed operations as a corporation; capital stock \$20,000. — Waltham Bleachery started up with full force.

**Ware.** In February, strike occurred among weavers in Geo. H. Gilbert Manufacturing Co.    *April.* Otis Co. decided to shut down Saturday afternoons during summer.    *May.* Work begun on John P. Pero's foundry plant. — Geo. H. Gilbert Manufacturing Co. added new looms.    *June.* Otis Co. added new and improved machinery. — Brick addition to Geo. H. Gilbert Manufacturing Co.'s mill completed.    *August.* Otis Co. reduced persons employed from 1,654 in July to 61 in August. — Chas. A. Stevens & Co., woollens, shut down for repairs. — Geo. H. Gilbert Manufacturing Co. ran three days a week. — Otis Co. made repairs.    *September.* Otis Co. started up on half time with reduction in wages and with 239 employes. — Geo. H. Gilbert Manufacturing Co. shut down on account of accident to engine.    *October.* Ware Lumber Co. started up box factory on full time. — High roof on part of C. A. Stevens & Co.'s mill removed and new flat roof put on. — Otis Co. and Geo. H. Gilbert Manufacturing Co. started up on full time.    *November.* New condenser added to Gilbert Mill.    *December.* Geo. H. Gilbert Manufacturing Co. reduced wages.

**Wareham.** In January, Franconia Iron and Steel Works closed; corporation dissolved by order of Supreme Judicial Court; plant leased in May by George F. Blake, Jr.    *March.* James C. Ware, iron founder, died.    *July.* John V. Morse's saw mill destroyed by fire.    *August.* Repairs made at Parker Mills Nail Works.    *October.* Parker Mills Nail Works started up after shutdown of six weeks.

**Warren.** In January, Chas. H. Comins fitted up old planing mill with new woodworking machinery. — Work at Warren Cotton Mills delayed by cold weather.    *March.* Sayles & Jenks, woollens, purchased land for new reservoir.    *April.* Work begun on new Slater engine works; foundry to be of brick, 60 x 250 feet, and machine shop, 50 x 72 feet, one story.    *May.* Sayles & Jenks, whose woollen mills were burned in September, 1892, began erection of new buildings: main mill, 230 x 50 feet, four stories; dyehouse, 30 x 110 feet, three stories; and weave mill, 40 x 130 feet, two stories. — Through efforts of Board of Trade, J. H. Blaisdell, woodworking machinery, purchased land and began erection of factory, 150 x 90 feet, one story.    *July.* Knowles Steam Pump Works ran five days per week. — A. W. Crossman, tools, died. — Warren Cotton Mills shut down on account of dull trade. — M. K. Whipple, cotton goods, shut down for balance of year.    *August.* After one week's shutdown Knowles Steam Pump Works started up with reduction in wages. — Work begun on reservoir to be connected with Sayles & Jenks' new woollen mills.    *September.* Warren Cotton Co. decided to permit operatives to occupy tenements, rent free, during shutdown. — Machinery placed in new works of Slater Engine Co.    *October.* Repairs made at No. 1 mill of Warren Cotton Co. and new spinning frames added; mills started on full time.    *December.* Thos. I. Shuttleworth, manager of Burtworth Carpet Co., died, aged 39 years; persons interested in the property assumed charge, reorganized the company, and incorporated with capital stock of \$6,000.

**Warwick.** In February, C. A. Williams began removal of shingle manufactory from Richmond, N. H., to this place.

**Watertown.** In April, addition made to dyeing department of *Ætna Mills*. *May*. *Ætna Mills* shut down temporarily for repairs. *June*. New engine and boiler added to Walker & Pratt Manufacturing Co.'s foundry. *September*. Thos. Dalby Co., underwear, resumed operations. — Foster Manufacturing Co., lead pencil sharpeners, began removal of shop from Boston to this place. — Walker & Pratt Manufacturing Co. resumed operations after two months' shutdown. *October*. *Ætna Woollen Mills* started up on full time with usual number of employes but with reduction in wages. *November*. E. C. Manufacturing Co. incorporated; capital stock \$20,000. *December*. Union Bag Works shut down.

**Wayland.** In February, Wm. & J. M. Bent, shoes, changed from private firm to corporation to be known as Bent Bros. Co.; capital stock \$70,000. *September*. N. C. Griffin and C. W. Dean, shoes, shut down. — Orlando Ewing began addition, 40 x 20 feet, to factory.

**Webster.** In March, Slater Woollen Co.'s mill destroyed by fire; to be rebuilt. *June*. Slater Woollen Mills ran on short time. *July*. O. C. Burnett's steam saw mill destroyed by fire. — H. N. Slater Manufacturing Co. shut down indefinitely on account of dull trade. — Strike of 200 employes occurred in factory of A. J. Bates & Co., shoes. *August*. A. J. Bates & Co. shut down indefinitely. — Slater Co. began erection of two-story addition to East Village Cambrie Mill and new chimney to North Village Mill. *September*. Slater Woollen Co. and H. N. Slater Manufacturing Co. resumed operations. *October*. Wages of employes in Stevens Linen Works reduced. — Strike occurred among lasters in factory of A. J. Bates & Co. *December*. Stevens Linen Co. shut down for two weeks.

**Wellesley.** In February, paint factory of Henry Wood's Sons Co. destroyed by fire. *September*. Richard T. Sullivan, wool extracts, started up after four weeks' shutdown.

**Wendell.** In April, John Putney began erection of new steam saw mill. *May*. Frick Piano Case Co. incorporated; capital stock \$12,000. — Pulp mill of Farley Paper Co. started up. *October*. Machinery set up in Frick Piano Case Factory.

**Westborough.** In April, Hunt Manufacturing Co., bicycle supplies, incorporated; capital stock \$30,000. *July*. National Straw Works shut down. *August*. Foundation of factory for Hunt Manufacturing Co. started; to be of wood, 40 x 104 feet, three stories. *October*. Hunt Manufacturing Co. began operations. — Forrest Forbes purchased interest of D. W. Forbes in Forbes sleigh factory. — National Straw Works dismantled. *December*. Bates' straw factory resumed operations. — Gould & Walker, boots, increased running time to eight hours. — Hunt Manufacturing Co. removed to new building.

**West Bridgewater.** In October, Charles W. Copeland, shoes, died.

**West Boylston.** In January, West Boylston Manufacturing Co. made additions and improvements. *February*. L. M. Harris Manufacturing Co.'s mill refitted with new machinery. *March*. Warren Howe, boxes, died, aged 53 years. *April*. West Boylston Manufacturing Co. shut down owing to accident to dam. *June*. West Boylston Manufacturing Co. added new machinery and increased capacity. *August*. L. M. Harris Manufacturing Co. began erection of addition to No. 1 mill, 49 x 76 feet, two stories. — Shutdowns for month: Clarendon Mills, L. M. Harris Manufacturing Co., S. R. Warfield, and West Boylston Manufacturing Co. — Fires for month: Spinning room of L. M. Harris Manufacturing Co., picker room of F. H. Rice & Co.'s cotton mill, and Warner's saw mill and box factory. *September*. L. M. Harris Manufacturing Co. resumed operations. *November*. Linus M. Harris, president of L. M. Harris Manufacturing Co., died, aged 79 years.

**West Brookfield.** In April, foundation of new corset factory started; to be of wood, 120 x 35 feet, three stories. *August*. McIntosh & Co., boots, ran four days per week.

**Westfield.** In January, Coleman, Warren, & Kenyon began erection of sash and door factory. *February*. Thos. F. McMains, cigars, died. — W. Warren Thread Co. enlarged plant. — Foundation started for new factory, 130 x 40 feet, four stories, for Great River Water Power Co. *March*. Johnson & Son purchased land for erection of new organ factory. — American Whip Co., High Speed Braider Co., Sandford Whip Co., and Massasoit Whip Co. sold



to United States Whip Co.    *April*. Crane Bros. completed three-story brick addition in which to manufacture paper canoes and boats. — Factory of A. E. Ensign Cigar Box Co. damaged by fire.    *May*. H. B. Smith Co. made improvements and repairs in foundry.    *June*. American Casket Co. added new engine. — W. Warren Thread Co. began erection of new storage building. — New boilers placed in H. B. Smith Co.'s foundry. — Quabog Hosiery Co. secured quarters at this place.    *July*. Atlantic Whip Co. occupied new factory. — Cascade Power Co. incorporated to erect and maintain dams and mills; capital stock \$100,000. — Peck & Whipple Co. sold to United States Whip Co. — Fogg & Ladd established new machine repair shop.    *August*. Foster Machine Co. shut down for repairs. — Directors of United States Whip Co. shut down all its syndicate factories owing to dull trade. — Plant of Crescent Manufacturing Co. sold to Textile Manufacturing Co. — Westfield Heating & Plumbing Co. incorporated; capital stock \$5,000.    *October*. Springdale Paper Co. shut down. — H. B. Smith Co. began erection of fire-proof storage building at plant. — Crane Bros. made improvements at mills.    *November*. Edwin Hedges, church organ pipes, removed to new factory building, 66 x 36 feet, four stories. — Crane Bros. added new engine. — American Brass & Rivet Co. sold to United States Whip Co.    *December*. Westfield Creel Co. incorporated to manufacture creels for use in cotton and woollen mills; capital stock \$100,000. — Steimer & Moore Manufacturing Co.'s factory started up with full force on short time.

**Westford.** In August, Abbott & Co., worsted goods, ran on two-thirds time; increased running time in September.

**Westminster.** In July, repairs made in Artemas Merriam's chair factory.

**West Newbury.** In January, L. F. Morrill & Son's shoe manufactory damaged by explosion.    *May*. T. M. Chase & Son, combs, made repairs and improvements.    *June*. Shoe factory of Walter Edelstein & Co. destroyed by fire. — Factory of L. F. Morrill & Son, shoes, destroyed by fire; business discontinued.    *July*. T. M. Chase & Son resumed operations after shutdown for repairs.    *October*. S. C. Noyes & Co., combs, resumed operations after one month's shutdown.

**Weston.** In October, Hook & Hastings changed from private firm and incorporated with capital stock of \$100,000.

**West Springfield.** In July, Agawam Paper Co. shut down for a short time.

**West Stockbridge.** In May, M. Truesdell's Sons sold pulp mill to Leonard F. Beckwith of New York, N. Y.; bought for the purpose of controlling Lake Mackanac for summer visitors.

**Weymouth.** In January, F. E. Hobart purchased property to establish manufacture of women's wrappers. — J. A. Cushman, sole leather, leased and occupied Haskell's factory.    *February*. S. Graves & Son sold out to Star Upholstery Co.    *March*. H. B. Reed & Co., shoes, leased Fogg factory building. — South Weymouth Shoe Co. discontinued manufacturing shoes, devoting time to leather coats.    *April*. M. C. Dizer & Co., shoes, increased capacity. — W. H. Clapp & Co., boots and shoes, changed business. — Loud & Son added new machinery to box-board mill. — Strike of 200 employes occurred in Bradley Fertilizer Works.    *May*. Torrey, Bullivant, & Co., boots and shoes, dissolved. — F. Dexter Pratt, shoes, died, aged 61 years.    *June*. Strike occurred among female operatives in M. C. Dizer & Co.'s factory.    *July*. Factory of John A. Holbrook, shoes, destroyed by fire; to be rebuilt. — Strike occurred among lasters in M. C. Dizer & Co.'s factory.    *September*. Work begun on repairs to John A. Holbrook's factory.    *October*. Frederick Cate added new engine and machinery to factory.

**Whitman.** In February, strike occurred among employes of Miller Cook, Jr.    *May*. Whitman Manufacturing Co. organized to manufacture articles from metal and leather; capital stock \$120,000. — B. E. Cole & Co., shoes, dissolved; to be continued by Perkins, Jones, & Co.    *July*. D. B. Gurney's tack factory damaged by fire.    *September*. W. H. Daniels & Co., boots and shoes, dissolved; succeeded by Whitman Shoe Co. — Commonwealth Shoe & Leather Co. resumed operations.    *December*. Whitman Electric Co. increased capital stock \$15,000.

**Wilbraham.** In May, Wilbraham Woollen Mill destroyed by fire; to be rebuilt.

**Williamsburg.** In January, Williamsburg Manufacturing Co. shut down owing to scarcity of water.    *April*. New machinery for manufacture of pail handles added to Hill's saw mill.

**Williamstown.** In July, Boston Finishing Co. incorporated; capital stock \$200,000. *September.* Repairs and improvements made in Williamstown Manufacturing Co.'s mill and operations resumed with reduction in wages.

**Winchendon.** In April, Baxter D. Whitney's machine works resumed operations. *May.* Whitney's machine works shut down for repairs. *August.* B. D. Whitney's machine works started up on half time. *September.* M. E. Converse & Son, toys, resumed operations. — B. D. Whitney made repairs on water wheel. — W. P. Clark & Co. began removal of machinery from this place to Waterville, Me. — L. Corbin established manufacture of surgical instruments. — Glenallan Mills and Village Mill, operated by N. D. White & Sons, resumed operations. *November.* B. D. Whitney's machine works started up after shutdown for repairs on dam.

**Winchester.** In April, James Houston, leather, died, aged 66 years. — Cutting & Co.'s lumber yard damaged by fire. *July.* Eugene L. Perry of leather firm of Griffin & Place, Boston, died, aged 85 years. *August.* Work begun on new manufactory for McKay Metallic Fastener Co.; building to be of iron and stone, 100 x 70 feet; completed in December. *September.* Chas. N. Bacon's felt mills shut down on account of dull trade for six weeks; repairs made about works during shutdown. — Work begun on new tannery and boiler house for Beggs & Cobb. *December.* Joel Whitney, manufacturer and inventor of machinery, died, aged 86 years.

**Windsor.** In September, Windsor Machine Shop resumed operations.

**WOBURN.** In January, Winslow S. Cobb & Co., leather, increased special capital to \$50,000. *February.* Merrimac Chemical Co.'s works damaged by fire. *April.* Factory of Stephen Dow & Co. destroyed by fire; firm leased Maxwell's plant at Winchester Highlands in May and resumed business. *June.* Beggs & Cobb incorporated as Middlesex Leather Co.; capital stock \$40,000. *July.* Business of J. K. Murdock & Co. purchased by Middlesex Leather Co. — Butcher's Rendering Association incorporated; capital stock \$3,000. — Russell Counter Co. ran on short time. — F. A. Loring & Co. went out of business; no successor. — Baeder, Adamson, & Co., glue, damaged by fire. — Merrimac Chemical Co.'s buildings destroyed by fire; to be rebuilt. *August.* Luke R. Tidd, retired shoe manufacturer, died, aged 71 years. *September.* Work begun on new factory for Merrimac Chemical Co.; to be of wood, 90 x 120 feet, two stories.

**WORCESTER.** In January, Pinkham & Willis Co. incorporated; capital stock \$50,000. — Harrison Woollen Mills added new machinery. — New boiler set up in Piedmont Mills. — Thos. Williams put in new engine and enlarged plant. — Whitcomb Manufacturing Co. moved into new building. — Foundation of factory for Washburn & Moen Manufacturing Co. laid; to be of brick and iron, 256 x 120 feet, two stories. — Fires for month: Whitcomb & Miles, shoes; Chas. Baker & Co., sashes and blinds; C. F. Darling, cigar boxes; C. F. Johnson, stairs; and Thomas & Co., cabinets. *February.* E. G. Higgins Co. incorporated; capital stock \$20,000. — Lovell Arms & Cycle Co. incorporated; capital stock \$5,000. — Worcester Corset Co. increased capital stock \$75,000. — Graton & Knight Manufacturing Co. increased capital stock \$100,000. — Lynn Shoe Supply Co. moved here from Lynn and changed its name to Worcester Counter Co. — Porter & Gardiner, lasts, added new machinery. — Wright & Colton Wire Cloth Co. ran nights. — M. J. Whittall purchased land for erection of spinning mill. — Fires for month: Worcester Star Foundry, Wm. Allen & Sons, Dean-Whiting Elevator Co., Worcester Razor Co., and J. F. & C. G. Warren. *March.* Geo. H. Corbett Co. incorporated; capital stock \$6,000. — F. E. Young Co., confectionery, incorporated; capital stock \$20,000. — Worcester Construction Co. incorporated; capital stock \$20,000. — Worcester Oil Co. made additions to plant. — Howard & Cutler established manufacture of card clothing. — Prespey Pero leased new foundry plant. — Union Manufacturing Co., overgalters, dissolved; continued by W. R. Heald. — Plymouth Lapboard Co. shut down permanently; dissolved by Supreme Judicial Court in October. — Strike occurred among fitters employed in J. W. Brigham & Co.'s factory. *April.* Worcester Machine Works incorporated; capital stock \$7,000. — Quinsigamond Co-operative Baking Co. incorporated; capital stock \$1,600. — Foundation to Arnold & Pierce's foundry begun; to be of wood, 20 x 60 feet, one story. — Foundation completed for foundry of New England Steel Works. — W. F. Bancroft & Co. dissolved and machine shop closed. — Fires for month: Hopeville Mills (picker room) and Abbott Menthol Plaster Co. *May.* Excelsior Cutlery Co. incorporated; capital stock \$5,000; new factory completed and machinery set up. — Goddard, Fay, Stone, & Co. put in lasting machines; lasters struck. — Waite-Bagley Co. purchased and occupied factory of Frank

Wesson Rifle Co. — J. J. Warren, leather goods, died, aged 71 years. — Fire damaged shop of A. Burlingame & Co. *June.* Washburn & Moen Manufacturing Co. increased capital stock \$500,000. — Morgan Spring Co. increased capital stock \$10,000; also began foundations for two new factories, one, brick, 40 x 80 feet, one story, the other wooden, 100 x 144 feet, two stories. — Foundation of addition to machine shop of Reed & Prince begun; to be of brick, 40 x 174 feet, five stories. — Worcester & Millbury Electric Street Railway Co. voted to increase capital stock. — Norton Emery Wheel Co. enlarged plant by two additions; one, 50 x 40 feet; another, 44 x 37 feet, both two stories with basements. — P. Blaisdell & Co., machinists' tools, added new machinery to plant. — Brown, Simpson, & Co. shut down piano department for two weeks. — Knowles Loom Co. reduced force on account of dull trade. — Drapery-Fixture & Wood Carving Co. shut down for balance of year. — O. N. Stark of E. H. Stark & Co., boots and shoes, died. *July.* Arthur C. King Co. incorporated; capital stock \$7,000. — Emerson, Low, & Barber Co. reorganized as Worcester Envelope Co.; capital stock \$38,000. — Ferris Chemical & Color Co. sold to Washburn & Moen Manufacturing Co. — Harrington & Richardson Arms Co. reduced wages. — Worcester Corset Co. reduced working hours to forty per week. — Knowles Loom Works and Crompton Loom Works reduced force one-half for balance of year owing to dull trade. — Worcester Carpet Co. and Washburn & Moen Manufacturing Co. ran five days per week. — Prentice Bros., machinists, reduced force. — Pease Machine Tool Co. discontinued manufacturing and property sold. — Boynton & Plummer ran three days per week. — Piedmont Mill shut down for four months on account of dull trade. — Shutdowns for month on account of dull trade: Cleveland Machine Works, Vocallon Organ Works, F. E. Reed & Co., Powell Planer Co., and rolling mill of Washburn & Moen Manufacturing Co. — Chas. F. Washburn, vice-president Washburn & Moen Manufacturing Co., died, aged 66 years. *August.* Washburn & Moen Manufacturing Co. increased capital stock \$500,000. — Morgan Construction Co. increased capital stock \$10,000. — H. C. Fish Machine Co. added manufacture of dynamos and motors. — Work discontinued on new plant of Morgan Spring Co. on account of dull trade. — W. H. Burns & Co., underwear, shut down. — Cleveland Machine Works shut down for three months. — Tatnuck Woollen Co. shut down indefinitely. — A. W. Ward, Agt., shut down for two weeks; two persons only employed in September and October. — Osgood Bradley & Sons reduced force for balance of year. — Aetna Knitting Co. shut down entire month. — C. C. Houghton & Co., shoes, shut down permanently; no successor. — Factories of E. N. Dean, heels, and John Whitaker, loom reeds, damaged by fire. *September.* Foundation of bottling factory of Thos. Parker completed. — Harrington & Richardson Arms Co. made second reduction in wages. — Bigelow & Darling shut down for two months. — Worcester Woollen Mill Co. shut down for one week. — M. J. Whittall, carpets, ran on half time. — Worcester Carpet Co. shut down for balance of year. — Draper Machine Tool Co. shut down month of September. *October.* Wright Machine Co. increased capital stock \$3,000. — Worcester Thread Co. leased building formerly occupied by Knowles Loom Works and removed machinery here from Clinton. — Minter Nut Co. formed. — Curtis & Marble damaged by fire. *November.* Rice, Barton, & Fales Co. occupied new plant. — Bigelow & Darling dissolved; business continued by Hopeville Manufacturing Co. — Nail department of Worcester Wire Co.'s shop shut down owing to dull trade. — Worcester Woollen Mill Co. shut down for two weeks. — Powell Planer Co. and Harrison Woollen Mill shut down for balance of year. *December.* Mawhinney Last Co. incorporated; capital stock \$30,000. — Kabley Foundry Co. incorporated; capital stock \$12,000. — A. L. Gilman moved into new plant. — Globe Corset Co. started up with reduced force. — Reed & Prince completed new brick addition, 275 x 40 feet, five stories. — Phoenix Plate Co. erected addition, 12 x 14 feet. — Loring & Blake Organ Co. sold to Taber Organ Co.

**Wrentham.** In February, Crook Bros.' yarn mill destroyed by fire. *April.* Knapp-Warren Co. increased capital stock \$5,000, and in May changed its name to The Seymour, Knapp, Warren Co. — Foundation for addition to Bacon & Co.'s jewelry factory started; to be of wood, 20 x 30 feet, three stories. *June.* Plainville Stock Co. and Wade, Davis, & Co. enlarged plant. *August.* Daniel Brown, straw goods, added new boiler. — Lincoln, Bacon, & Co. resumed operations.

**Yarmouth.** In March, F. P. Baker, barrels, died.

**THE STATE.** From the information supplied by manufacturers and from other sources, the preceding Chronology has been prepared. It has been undertaken as a portion of the regular work of the Bureau chiefly in order that its files and records may be kept in perfect condition.

As stated in the Chronology for 1892, "it has been impossible to verify every statement made or printed, and while due care has been exercised it is quite probable that some errors have crept in. Neither is the information considered complete as covering every operation which occurred during the year, but it includes the more important ones."

The foregoing Chronology returns are made from 227 cities and towns, as against returns made from 202 cities and towns in 1892. The following table presents a summary of the facts shown in the preceding pages placed in comparison with the items contained in the Industrial Chronology for 1892:

CLASSIFICATION OF CHANGES, SUSPENSIONS, FIRES, ETC.	NUMBER OF ESTABLISHMENTS REPORTING SPECIFIED CHANGES, SUSPENSIONS, FIRES, ETC.	
	1892	1893
Firms, establishments, and industries new to towns, . . . . .	150	106
Buildings constructed during the year, . . . . .	230	77
Machinery added to plants, . . . . .	198	243
Other additions to plants, . . . . .	157	100
Addition of new class of product to manufacture, . . . . .	20	16
New industrial corporations organized, . . . . .	58	110
Amount of capital stock of new industrial corporations, . . . . .	\$3,706,600	\$5,153,600
Rebuilding of burned factories, etc., . . . . .	19	8
Removals to larger quarters, . . . . .	47	26
Resumption of business after protracted shutdowns, . . . . .	11	4
Use of important new inventions, . . . . .	10	3
Changes from private firm to corporation, . . . . .	31	39
Amount of capital stock covered by such changes, . . . . .	\$1,492,800	\$2,916,000
Changes in firms, firm names, etc., . . . . .	118	89
Changes in character of product, . . . . .	8	5
Changes in character of machinery, . . . . .	9	5
Changes from hand to machine lasting in Boots and Shoes, . . . . .	13	2
Consolidation of firms and corporations, . . . . .	4	13
Increases in capital stock, . . . . .	17	40
Amount of increase in capital stock, . . . . .	\$3,305,000	\$4,713,200
Decreases in capital stock, . . . . .	-	5
Amount of decrease in capital stock, . . . . .	-	\$269,600
Net increase in capital stock, . . . . .	-	\$4,443,600
Removals of firms and industries to Massachusetts from other States, . . . . .	12	3
Removals of firms and industries from Massachusetts to other States, . . . . .	5	11
Removals from one town to another in Massachusetts, . . . . .	31	35
Increases in number of employes, . . . . .	23	19
Reductions in number of employes, . . . . .	-	63
Increases in rate of wages paid, . . . . .	11	3
Reductions in rate of wages paid, . . . . .	1	87
Increases in hours of labor per day or week, . . . . .	-	27
Reductions in hours of labor per day or week, . . . . .	-	148
Running overtime and nights on account of rush of orders, etc., . . . . .	76	45
Introduction of electric lighting and power into factories, etc., . . . . .	15	11
Suspensions for vacations, . . . . .	96	10
Suspensions for stock taking, . . . . .	-	17

CLASSIFICATION OF CHANGES, SUSPENSIONS, FIRES, ETC.	NUMBER OF ESTABLISHMENTS REPORTING SPECIFIED CHANGES, SUSPENSIONS, FIRES, ETC.	
	1898	1893
Suspensions indefinite as to duration, . . . . .	21	40
Suspensions for curtailment of production, . . . . .	6	1
Suspensions on account of dull trade, . . . . .	3	94
Suspensions on account of low water, . . . . .	10	10
Suspensions on account of high water, . . . . .	-	15
Suspensions on account of strikes and lockouts, . . . . .	-	150
Suspensions on account of accidents to machinery, . . . . .	43	200
Suspensions for repairs and improvements, . . . . .	56	68
Suspensions (cause not given), . . . . .	-	292
Retirement from business (no successors), . . . . .	29	32
Dissolution of private firms and corporations, . . . . .	2	31
Auction sales of industries or plants, . . . . .	9	9
Sales of plants in whole or in part, . . . . .	85	86
Sales of plants to syndicates or trusts, . . . . .	2	8
Fires during the year, . . . . .	283	288
Plants damaged by explosions, . . . . .	11	12
Deaths of manufacturers, . . . . .	59	65

\* Not reported in 1892.

It will be seen from the first line of this table that, in 1898, there were 106 instances of new firms, establishments, and industries reported as established for the first time in the cities and towns under consideration. By the second line, 77 new factory or mill buildings were reported as being completed during the year 1898; this number does not include those factory or mill buildings announced as started, only those reported as being completed during the year. In the fourth line are included the addition of new wings, storehouses, or similar additions to factories already built. There were 288 cases of damage by fire in 1898 and eight instances of rebuilding of burned factories. Undoubtedly the other factories were either repaired or rebuilt, but no report was made concerning them. The other lines of the table may be read in a similar manner.

In the following table we present, by months, the number of suspensions as recorded in the preceding table for the year 1898:

MONTHS.	CAUSES OF SUSPENSIONS							
	Vaca- tions; Stock Taking	Indefi- nite; Not Given	Ac- cidents; Low Water; High Water	Repairs and Improve- ments	Curtail- ment; Dull Trade	Retire- ment; Dissolu- tions	Strikes	Totals
January, . . . . .	5	8	8	2	-	2	5	30
February, . . . . .	2	-	42	1	-	5	9	59
March, . . . . .	-	3	4	6	-	13	38	64
April, . . . . .	1	4	8	4	1	8	28	49
May, . . . . .	1	6	17	6	4	12	20	66
June, . . . . .	1	9	128	2	2	3	10	155
July, . . . . .	7	52	1	15	15	3	3	96
August, . . . . .	4	124	4	11	55	6	5	209
September, . . . . .	-	47	5	10	9	2	10	83
October, . . . . .	-	30	7	2	3	7	12	61
November, . . . . .	3	24	4	7	5	-	8	51
December, . . . . .	3	25	2	2	1	2	2	37
TOTALS, . . . . .	27	332	225	68	95	63	150	960

Condensations have been made in the first, second, third, fifth, and sixth columns in the above table. In the first column suspensions for vacations have been combined with those for stock taking; the latter occurred in the following months: January, 5; February, 2; April, 1; May, 1; July, 2; August, 1; November, 3; and December, 2. In the second column we have combined those reported as "indefinite as to duration" with those for which the cause of suspension was not given; the former occurred as follows: January, 1; March, 1; June, 2; July, 5; August, 10; September, 3; October, 7; November, 5; and December, 6. It is to be regretted that 292 establishments had to be classified as not giving the cause of suspension, but it was undoubtedly occasioned by the general depression in business. In the third column the causes of suspension are combined as follows: Accidents to machinery — January, 6; February, 40; March, 4; April, 3; May, 3; June, 128; August, 2; September, 4; October, 5; November, 4; and December, 1. Low water: January, 2; February, 1; July, 1; August, 2; September, 1; October, 2; and December, 1. High water: February, 1, and May, 14. There was but one instance of suspension for curtailment of production, it being reported in the month of April. Suspensions on account of retirement from business and the dissolution of private firms and corporations have been consolidated in the sixth column; the latter occurred as follows: January, 1; February, 3; March, 5; April, 7; May, 5; August, 3; September, 2; and October, 5.

The 288 fires reported as having occurred during the year 1893 were distributed through the following months; comparative figures for 283 fires in 1892 are also given.

MONTHS.	NUMBER OF FIRES		MONTHS.	NUMBER OF FIRES	
	1892	1893		1892	1893
January, . . . . .	36	32	July, . . . . .	16	28
February, . . . . .	25	27	August, . . . . .	16	17
March, . . . . .	25	34	September, . . . . .	13	14
April, . . . . .	28	27	October, . . . . .	19	17
May, . . . . .	40	23	November, . . . . .	28	18
June, . . . . .	18	23	December, . . . . .	19	28







